

# Journal of the Royal Institute of British Architects

THIRD SERIES

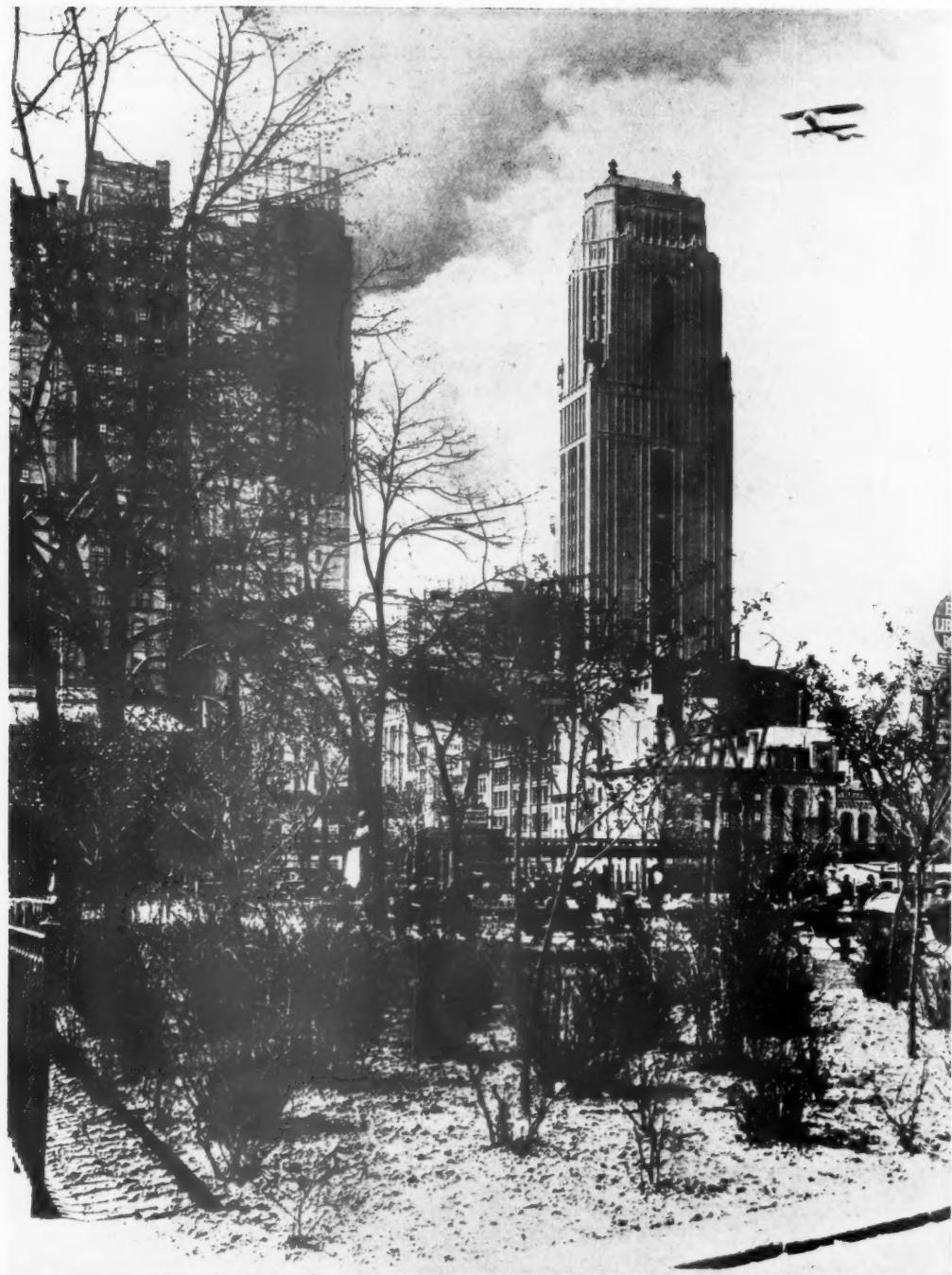
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BUSH BUILDING, NEW YORK  
Helmle, Corbett and Harrison, Architects



FIG. 1.—Bird's-eye view of Lower New York showing that skyscrapers are grouped in zones; that high buildings are not the result of a narrow island on which there was no room to expand laterally. The total quantity of building on Manhattan Island to-day is not more than the total quantity of building in the centre of London covering a similar area.

## The Latest American Building Methods

BY HARVEY WILEY CORBETT [F.], F.A.I.A.

[*A Talk before the Royal Institute of British Architects at an Extra General Meeting on Monday, 31 October 1927*]

IN America, unhampered as we are by tradition, a new country free to move in almost any direction that commerce and habits of life dictate, we are developing something which, I think, will be of world interest. We have a new form of construction. It is not new to you, but it is comparatively new if we think in terms of the ages—something which has completely revolutionised architectural ideas. Architects find themselves confronted with the problem of doing their work from a totally different angle from the one they have been following in the past. When you realise that for 6,000 years Egypt had only one structural principle in her buildings, that of the post and lintel: that Greece followed with the same structural principle, though with a refinement and system of detail and proportion which the world has never since equalled: that then Rome introduced the masonry arch, you also must realise that these were the only principles in buildings until fifty years ago, in spite of all the changing styles, structurally speaking.

Then came steel, the skeleton construction; it is now an accepted method of construction

over the whole world. It has made possible the piling up of storeys to great heights; it has made possible extremely rapid construction. Speed and steel are the two most important factors affecting our present American architecture. An additional factor, which is a result of those two, has been a new conception in regard to the permanency of buildings. Buildings in the past have been erected with the thought of lasting almost indefinitely; they have lasted centuries, as you have them here in the Old World. But, with speed of construction, the idea that a building is necessarily permanent is gradually being replaced by the idea—in America at least—that a building is designed for a specific purpose and for a specific time, and that its life is limited to its usefulness for that purpose. In our commercial work we design buildings to last a matter of 25 or 30 years. They are structurally quite as sound buildings as have ever been built. We do not know what is the life of steel in terms of centuries, but at least we feel that, from the structural point of view, the building is durable, but we do not expect it to last, from its practical, its serviceable, point of view. We

expect to have that building taken down at the end of 25 years and replaced by a new building, one which will better serve for that particular time. If you could imagine that motor cars had been built with the thought of their lasting a hundred years, you would get an accurate picture of what we might be riding round in to-day, a sort of misplaced chariot, with the engine concealed under the shield at the front. But the idea was that the style of motor car originally built would only last a short time, and that styles would change and there would come a demolition of the old cars. That same idea is now being applied to buildings. With rapid construction has come this change in architectural styles, in the architect's problem, and in his respect for old styles and forms. He finds them no longer applicable to his present-day needs. With the subject of construction and the quantity of construction, the distance from the past, from the history of architecture, becomes greater and greater. It is not a question of years; it is a question of the amount of work that is done. The old buildings, built to last centuries, retained a certain position in the community, which was an inspiration to the next builders. But now we change with the seasons.

I shall show you a series of pictures, some of which you are familiar with; they are views of New York. New York is typical of all America. I do not show them to you with the thought of recommending that you should follow our example; I would be the last person to suggest sky-scrappers for London. I think we are creating a style of architecture which is indigenous to America, and it is a style which will go down in history as an historic style, just as we have the Italian Renaissance, or the Roman, or the Greek, or the Louis XVI, or any other period. So in presenting these things I am giving you, as nearly as I can, the facts as we have them. I am sure you will take exception to many of the things I say; I hope you will; if you do not, I shall be greatly disappointed.

Commencing with a general air-view (Fig. 1), New York is seen as a pile of buildings which give the impression that we have high buildings in New York because we are kept in a confined space on an island, Manhattan Island, and have to build upwards because there is no room to spread laterally. But that is not the fact in New York at all. Taking the Island of Manhattan, which

is its most congested portion, the real quantity of space would not equal an average of four storeys; that is to say, it would be about the same quantity of building space, on the same area, which exists for London. In the lower half of Manhattan Island, there is a large area which has only 3, 4, and 5 storey buildings. The sky-scrappers are concentrated in certain locations, and the tendency is growing in New York to concentrate groups of sky-scrappers in which certain types of business are carried on. There is, for example, the financial centre, and just above it is the Woolworth Building, which is the Law centre.

Looking up the island, one can see how these sky-scrappers run like a ridge or spine up certain streets; they are arranged in groups, one after the other. That is interesting, because it is a very efficient method of carrying on business. In a sky-scraper group a great many people are brought together in a small area who are doing business of the same kind, with the result that there can be, without much loss of time, the personal contacts which are necessary. In 42nd Street, where I have my office, all building interests are concentrated, so that, on receiving a telephone call, in fifteen minutes' walk I can be at the office of any other architects, builders, engineers, material supply men, and other men with whom I am dealing. And it would be possible, easily, to fill 15 or 20 similar appointments in one day from 10 to 4 o'clock. But imagine trying to do such a thing as that in London! I think that here I should do well to fill more than three appointments in one day. The sky-scraper development in New York has been the result of a real economic idea in business efficiency. If it had not been for that, I do not think we should have had sky-scrappers as we have them to-day. The original sky-scraper may have started simply through the necessity of some property owner to exploit that particular locality to the greatest possible extent. Not having any restriction placed on him in regard to height, he could go as high as he wished. But exploitation would not continue; that in itself is never successful. There must be some fundamental economic reason for the city's growth such as we have it; and I think that economic reason is expressed by the greater efficiency in business which is secured through these concentrated zones of sky-scrappers.

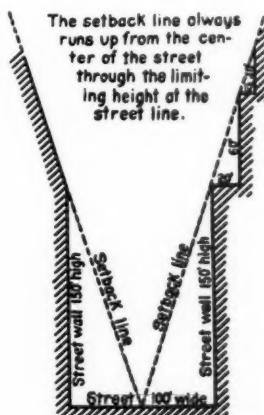
Up to the present time the building efforts in

New York have been entirely individualistic. There has been no general community interest; each man built as he saw fit, as business interests seemed to dictate; and New York City, while it is interesting architecturally, is in many ways a great jumble, a mass of all sorts of buildings; forty-storey buildings alongside four-storey buildings, and so on. It occurred to me that if that same idea were carried out in an apartment house, it might be interesting to see what it would pro-

duce a city which had already developed skyscrapers to as low a basis as 80 feet, such as you have in London. So we divided it into zones. Some are in height two and a half times the width of the street in the amount of street wall front. Then we drop down to two times, one and a half times, and one time, which is the resident district restriction. The buildings go straight from the street level to a height which is a factor of the width of the street, depending on the zone.

#### SETBACK PRINCIPLE.

*Typical example in a 1½ times district, for streets 50' to 100' wide.*



#### HEIGHT LIMITS - 1½ TIMES DISTRICTS

*Same principles apply in each of the other districts  
Setbacks may be at each story or several stories at  
once or in the form of a mansard*

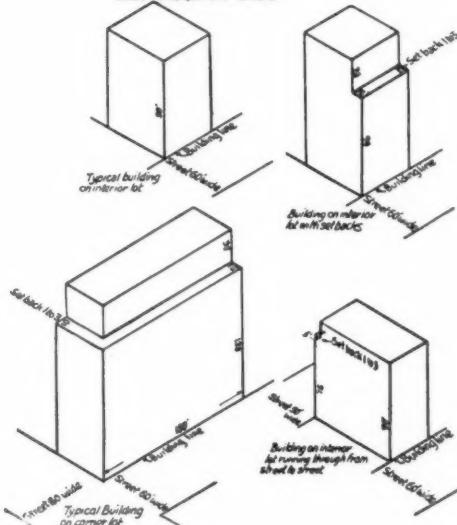


FIG. 2.—DIAGRAM OF NEW YORK'S ZONING LAW FOR BUILDING HEIGHTS

duce. If each owner, or each tenant in an apartment house designed his particular apartment, on the inside and on the outside, just as he would like to have it, the resulting design might be rather ridiculous. But our American cities, if we regard each property owner and each site, are quite as ridiculous when viewed from the community standpoint. Some ten years ago, with the idea of trying to regulate buildings, we passed what are known as our "Zoning Laws," a regulation as to height, as to the use of buildings (Fig. 2). These zoning laws have been in operation just eleven years. In principle they were based, largely, on your London Building Act; but we could not

then they must remain within a line drawn from the centre of the street through the cornice. They can slope back, or they can step back in storeys. In some respects that is like your London Building Act, only with us there is no limit to the height within the line. When a wide and a narrow street come together, the wide street takes precedence, and the building can be carried back to 150 feet.

In the dormer type of building over 60 per cent. of the front of the building can be carried out in one or several portions to a height of 60 feet or more, which gives a little variety in the street cornice line. In addition, towers are permitted over 25 per

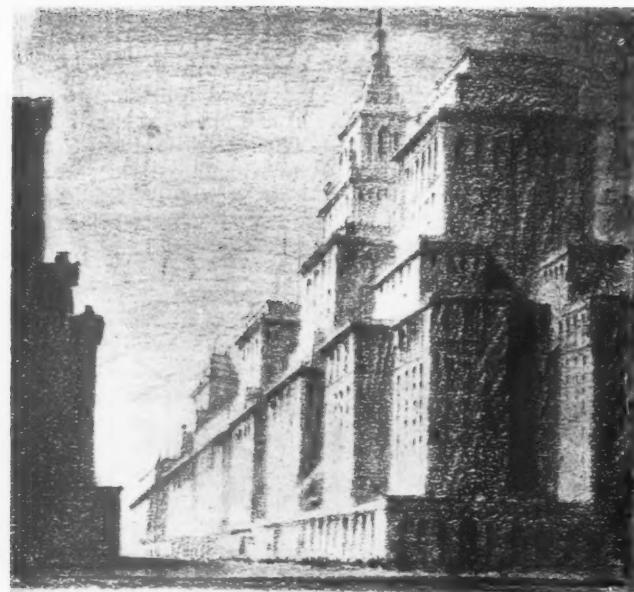


FIG. 3.—Chaos and order: contrasting old system with possible results under present building laws

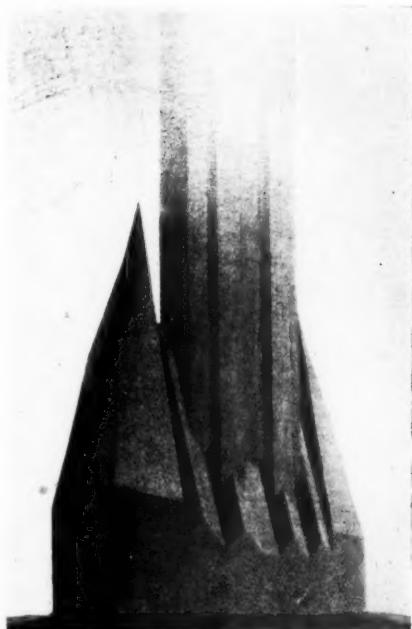


FIG. 4.—Legal envelope within which a building must be contained

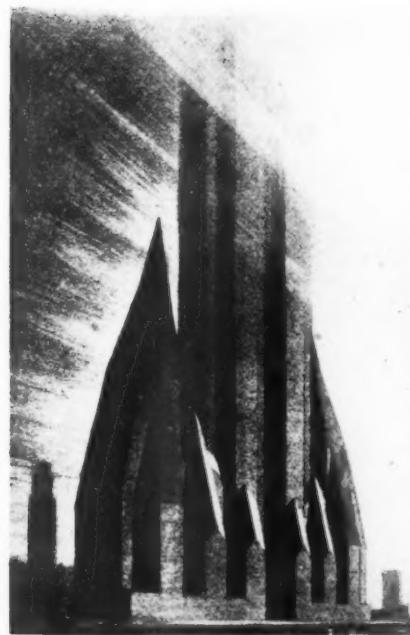


FIG. 5.—The same as Fig. 4, but cut into to let light into interior of building

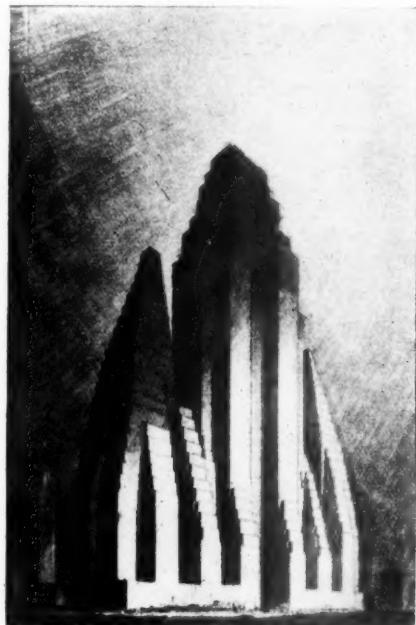


FIG. 6.—The same as Fig. 5, with sloping surfaces straightened up

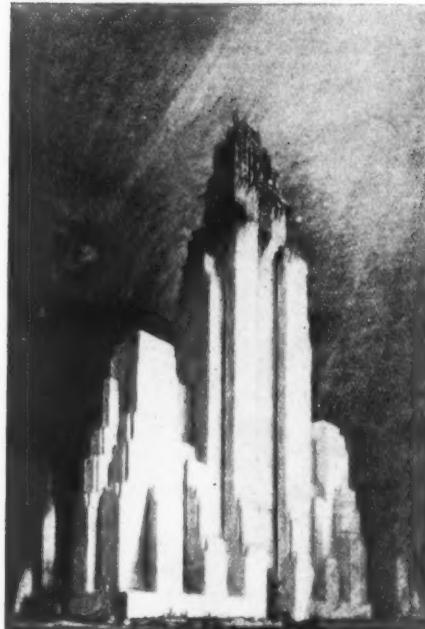


FIG. 7.—The same as Fig. 6, but set-backs adjusted to steel stanchions and points cut off to economic areas. Shows a mass of building needing little architectural embellishment

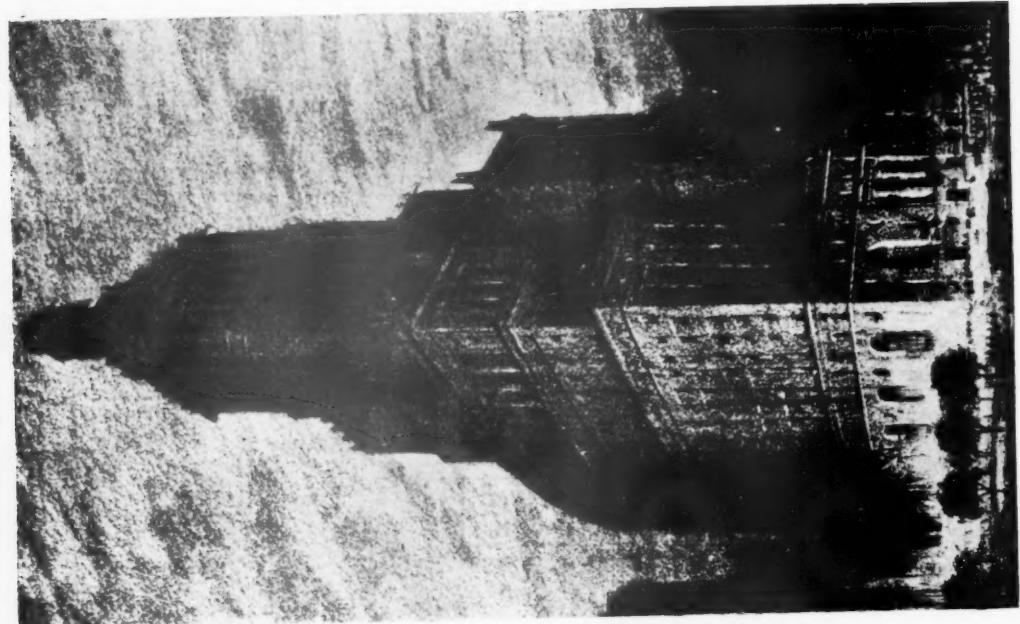


FIG. 8.—EXAMPLE OF PRESENT LAW: STANDARD OIL BUILDING  
Carrere and Hastings, Shreve and Lamb, Architects



FIG. 9.—NEW YORK TELEPHONE BUILDING  
McKenzie, Vorhees and Gmelin, Architects

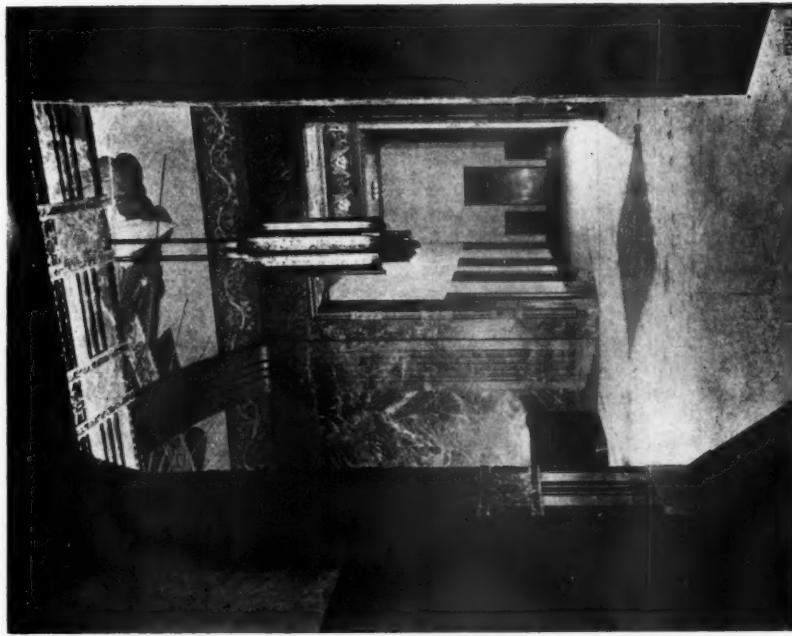


FIG. 11.—INTERIOR OF NEW YORK TELEPHONE BUILDING

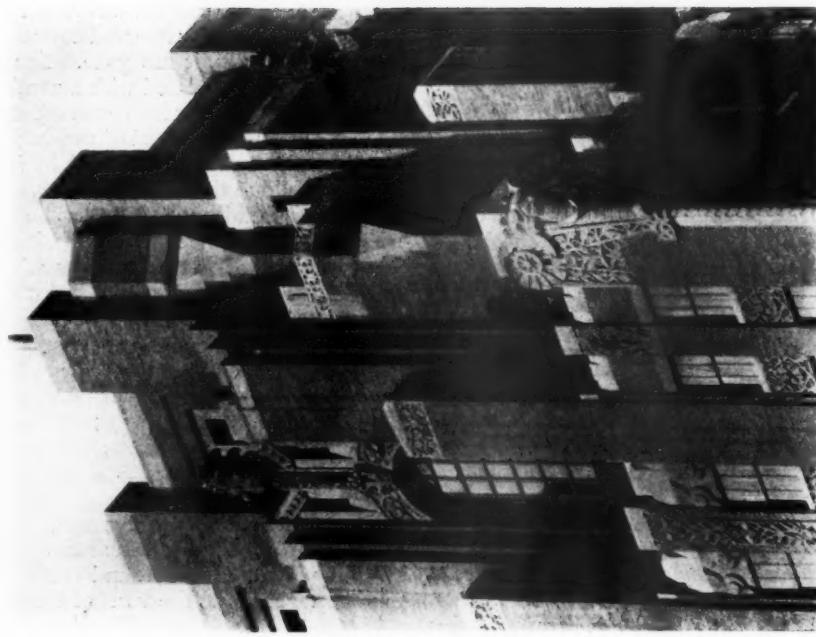


FIG. 10.—DETAIL OF NEW YORK TELEPHONE BUILDING

cent. of the area of the lot. It was not possible to pass a law eliminating towers entirely, because New York already was a city of towers (Fig. 3).

Consider the operation of the law on one of our squares. Most of New York City is rectangular; avenues run north and south, far apart; the streets run east and west close together. In a lot about 200 feet wide by 600 feet long the law would allow us to build to the limits in height, the tower being unrestricted, the restriction being only that placed on the owner by structural conditions. But we should not like a building of that sort, so we cut courts from outside in the building, to give light to the interior, and make proper depth spaces. But it would not be a practical building; the tower could not go on indefinitely, so we cut it down, straighten up the edges with setbacks, and we begin to get the semblance of a building. The steel structure comes into the picture. The setbacks balance with the steel rectangular system inside the building (Figs. 4, 5, 6 and 7).

In a typical building of the kind which covers a whole square, with a tower in the centre, the old ideas of architecture do not appear. No thought is given to the style or to the kind of cornice, nor whether the decoration is to be in Louis XV style, or in Roman; and yet we have, as a mass problem, a building which is already of sufficient interest to need almost no architectural embellishment. It is a new point of approach for the architect. If I were to define the architect to-day, I would not define him as a man who decorates buildings; I regret to say he has been that in the past. The owner dictated what should go on inside the building, the engineer dictated the construction, and then the architect was called in and asked to put on the trimmings. And the only reason he was called in was that the owner felt a little uncertain about style in architecture, and turned to a specialist in style. In America at least, that time has passed. The architect there to-day is a sculptor in building masses, and the materials with which he works—the clay in his hands—are the practical conditions of his problem, the restriction of law, the structure that he has to put together. The problem is to present the most interesting silhouette, the most interesting mass form that he can evolve, and detail of style is only a secondary consideration.

I want to show you some pictures of real buildings which illustrate how this law is being carried into effect. The first building, starting at the point of the island, is the Standard Oil Building, by Mr. Hastings, whom you honoured with your Royal Gold Medal recently (Fig. 8). That portion of the city is not rectangular in its streets. It is the oldest part of the town, and the streets wind about very much as do the streets in London.

The next picture shows the new Telephone Building, as seen from the river (Fig. 9). On the left is the Woolworth Building, on the right is the Singer Building. You see the effect of the Zoning Law in the setbacks, and the use of the 25 per cent. area in the central tower. This Telephone Building, put up by McKenzie Vorhees and Gmelin, is the most interesting modern building in New York, because the architects approached their problem from the point of view of designing something with respect for this present Machine Age; they thought in terms of what could be done with the labour of to-day, with the construction of to-day, with the machinery by which the materials must be formed. That spirit has been carried out all through the construction.

In matters of detail you will see that the old-fashioned cornice has disappeared entirely (Fig. 10); it was meaningless when it was raised to a height of twenty or forty storeys; it served no practical purpose, and so, practically, it has gone. You now seldom see a tall building erected with a cornice line. The vertical accent is never lost, even when the building reaches its climax. Instead of crossing it with a horizontal band, the band is secured by inserts, which tend to continue the vertical accent, and in the interior of this building the same has been carried into effect (Fig. 11). The marble work, instead of being cut in pilasters with flutes carefully chiselled out, has been designed so that the material can be made in a machine. In the Middle Ages the men who designed the things we admire so much designed them with respect to the means they had for carrying them out. As architects, our purpose is to do the same thing in the same way; to learn to use the machine as a basis of design, and see if we cannot evolve something which is characteristic of this period and this time.

Going further up the Avenue, we come to an hotel, 1, Fifth Avenue, which has just been completed by Helme, Corbett and Harrison, architects (Fig. 12). It shows the vertical accent which is so

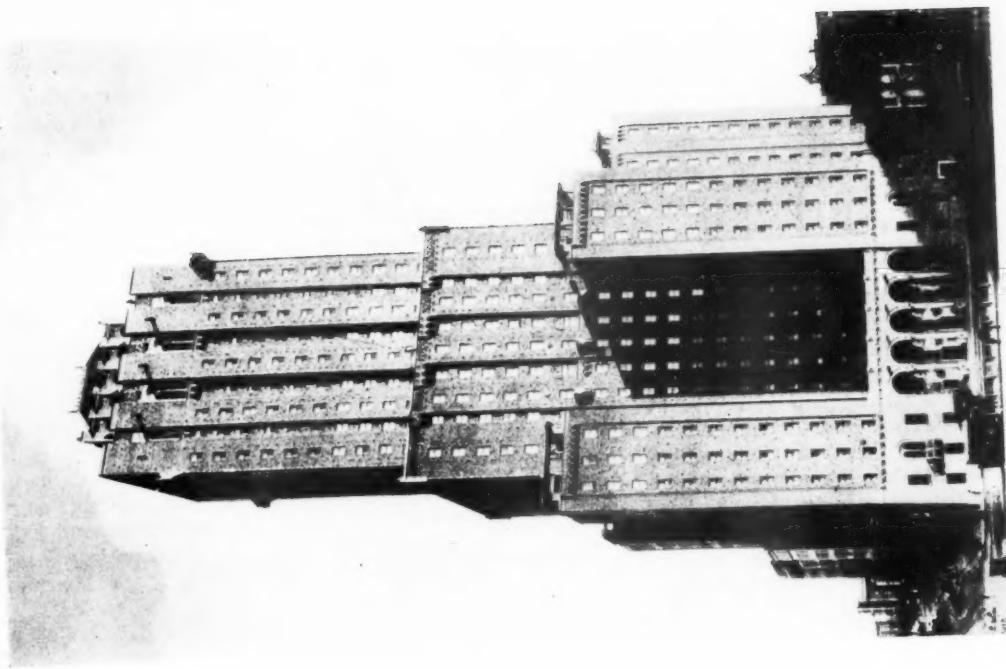


FIG. 13.—SHELTON HOTEL  
Arthur Loomis Harmon, Architect

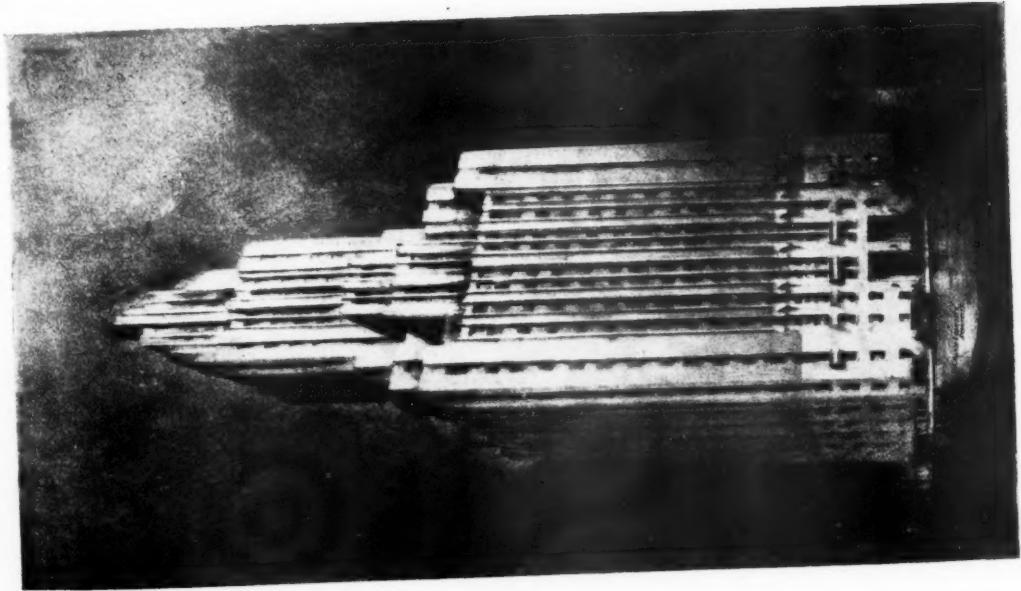


FIG. 12.—APARTMENT HOTEL, 1 FIFTH AVENUE, MANHATTAN  
Helmle, Corbett and Harrison, Architects

dominant in these tall buildings. Mr. Gilbert, in his Woolworth Building, was the first man to realise the value of the vertical composition of a vertical mass. He was the leader in that respect, and it has been the guiding idea in all our buildings.

Further north, in 42nd Street, is the Bush tower, which was built in the centre of the block (*Frontispiece*). There we decorated the side by simulated lines in white and black brick, so that it would not stand gaunt while waiting for other buildings to screen it.

Still further north is the Shelton Hotel, in 49th Street (Fig. 13). Mr. Harmon has done, I think, a very marvellous thing in this building, and for it he received the Medal of the American Institute last year. He has carried it out in a spirit which is new and fresh, the spirit of to-day, and yet it recalls to a degree the past. I think that is the ideal combination for our modern architecture.

I want to give you an idea of how building is going in New York, the rate at which it is moving in this particular district of the city, and how the Zoning Law is affecting the building lines. When I first started practice in New York, I thought I was fairly well in touch with what was happening in the city. We were always curious about every new building, and, particularly, we wanted to know how the architect got the job. Now it is impossible to keep track of what is happening in New York. I look out of my office window in the top of Bush tower and see a new sky-scraper emerging over night. I call in a draughtsman to ask if anybody knows what it is, or whose job, but they seldom know anything about it (Fig. 14).

The next picture illustrates the horizontal idea in architecture, which is characteristic of your city. The first designs we made for the Bush group were vertical, although we were limited in height. But we realised, when we came over here, that that would not fit in this environment. Therefore all those designs were altered, and what you see here is the development on Aldwych of that island site. The two flanking wings were always part of the scheme. And the excuse of the great arch is clear, I think, when you see it framed as it is there.

I am going to take a few minutes to run through another problem which we have in New York, and which, in spite of the fact that you have no skyscrapers, you have here also in London. That is, traffic, and what traffic may mean to architecture. The suggestions I offer are being thought of in

New York. Whether they will ever be carried out I am sure I cannot tell.

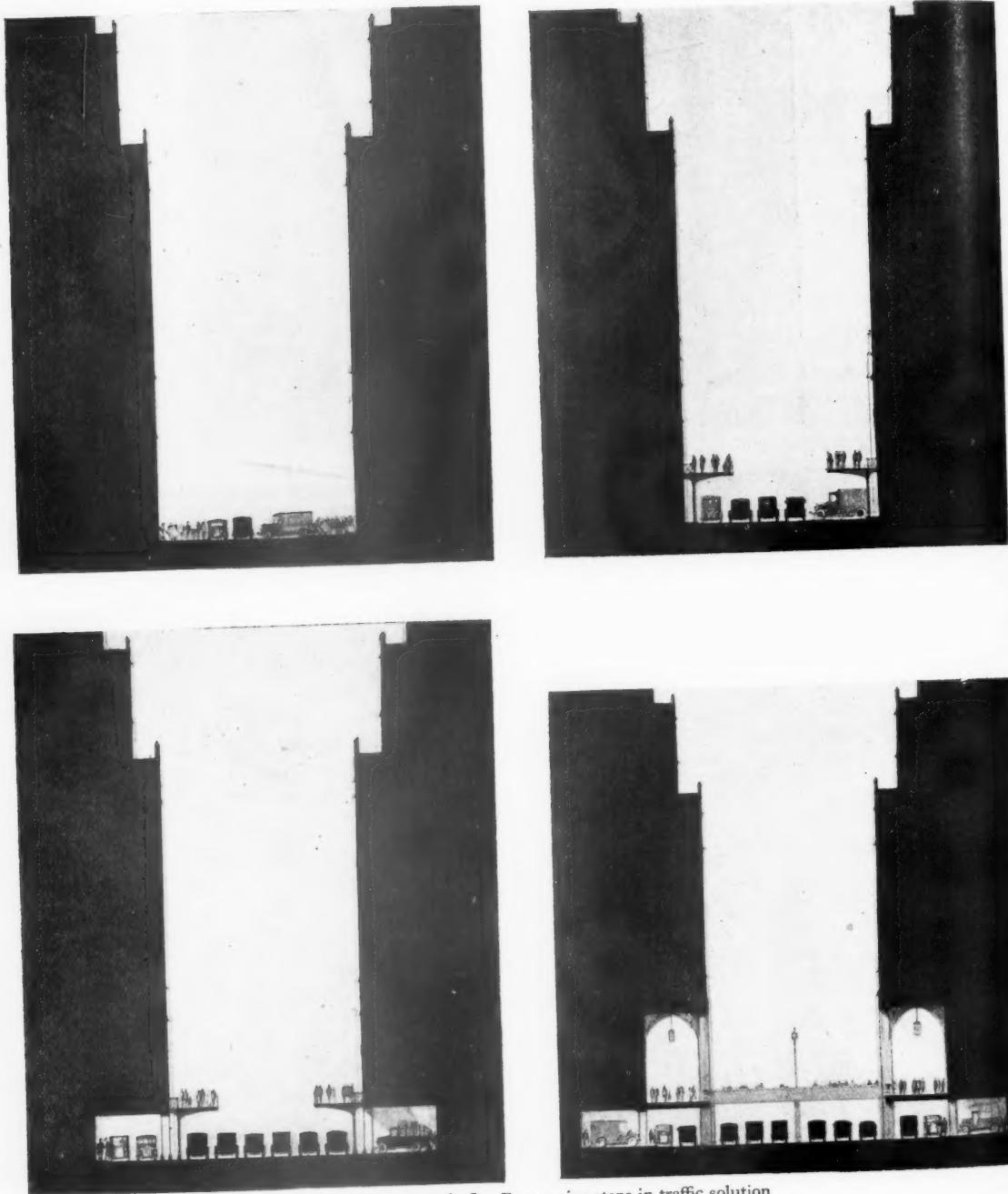
Much might be done in dividing pedestrian and vehicular traffic by erecting temporary sidewalks. But in going a step beyond and widening the street pedestrians might be eliminated, not by killing them, but by a process of lifting them above the traffic, so increasing the street capacity six times in a 60 feet street. Then we propose that all future buildings shall be framed so as to allow for an arcade sidewalk within the building line, instead of projecting as shown on the temporary sidewalk. Possibly within a limited time, if such a law were carried into effect, the whole district would be rebuilt and re-framed with the arcaded side-walk. Pedestrians would be protected from the heat of the summer sun and the cold and rain of winter—and of summer too. And there would be an increase of street capacity; you cut out no light and air compared with what you had before, and I think the plan has taken care of any possible growth in proportion to the buildings (Figs. 15, 16, 17 and 18).

The city would be a sort of modernised Venice, in which the canals, instead of being filled with water, would be filled with rapidly moving automobiles, and their tops would be seen glistening in the sun as they passed. The pedestrian would look down on the traffic. The plazas and open spaces would be lifted to the level of the sidewalk, and beneath these plazas would be parking space for automobiles (Figs. 19, 20 and 21).

With this thought in mind we might look into the near future to our city development: I say the near future because I think it is possible within the next thirty or forty years, or even sooner. You can see what a square in New York might be like. There is a constant cornice line at the first setback, and it is turned into an upper sidewalk. Below this point would be business, carried on practically in all-glass buildings. Above that point would be residents, bringing together residence and business, which are now gradually tending to drift apart, making the problem, in New York, that of transporting about half the population twice daily. People could move about for their shopping, small shops being on the upper section; and when a man left his office he would take the elevator and go to his residence. Movement would be free, traffic would be divided into its natural divisions, and I think it would make a very livable and attractive city (Fig. 22).



FIG. 14.—Aerial views of the same locality taken four years apart showing building progress



Figs. 15, 16, 17 and 18.—Progressive steps in traffic solution



FIG. 19



FIG. 20



FIG. 21



FIG. 22

Figs. 19, 20 and 21.—Perspective views showing architectural effect of such traffic solution  
Fig. 22.—Future city with residence above business: different levels for pedestrians and motors, upper sidewalk for residents

Looking into the still more distant future, we see what might be the ultimate city—artificial light having replaced daylight, a city operating on a 24-hour basis—I hope with 6-hour shifts, airplanes moving about instead of motors.

You see we have ahead of us a real problem for the imagination of the architect to deal with, and I think that possibly the time may come—and not be so very distant—when we will have just as fine a period of beauty in art as the Greeks had. The

Greeks were able to create what they did because a small group possessing a large slave population was able to devote itself entirely to thoughts of beauty in all forms. It is not likely we shall ever recreate the condition of a slave population, but we do have the slave machine, and there is no reason why the machine cannot be used to relieve humanity of the burden of labour, and allow them to be free to devote their energies and their thought to making the world finer and more beautiful.

## Discussion

(MAJOR HARRY BARNES [F.] IN THE CHAIR.)

The CHAIRMAN (Major Barnes): I am happy in being able to tell you that, while we have the advantage, in this lecture, of hearing a distinguished American who has come to London, we have also the advantage of the presence here of a distinguished Englishman who has been to America, with, I think, Mr. Corbett will admit, some advantage to that great country. I refer to Dr. Raymond Unwin, and I have the greatest pleasure in asking him, on your behalf, to move a vote of thanks to Mr. Corbett.

Dr. RAYMOND UNWIN [F.]: We have not had quite the lecture which I expected; no doubt that was my mistake; but we have had a lecture which illustrated one of the faculties that an architect needs in a supreme degree, and that is the faculty of imagination. So much is that so that it would be difficult, I think, for many of us in the old country to follow it. Indeed, it is difficult to follow, as our lecturer says, what is going on in New York. I am astounded at the newer photographs which he shows; those of about four years ago illustrate more nearly what I remember, and what some of those here also remember perhaps when we visited America for the gathering of the Town Planning and Architectural groups in New York 2½ years ago. Since then there has been a very great development of building under the new Zoning Regulations.

I was very glad that the lecturer recognised that that type of building and the type of development which is adapted to a new country like America is not what he wishes to see develop in this city; I think that even in New York I should hesitate to accept the forecast that buildings will continue, as much as they have done in the last few years, to be built with a view to 25 or 30 years of life. I attribute the rapid change of character of buildings in American cities to two circumstances, both of which, I think, are likely to change considerably in the future. One of them is due to the fact that in the past the Regulations in New York were of the most individualist nature, and it was quite

common to get a 16 or 20-storey building planked down next door to a millionaire's house of, perhaps, two storeys and an attic, or three storeys. On the last time but one that I was in New York I stayed with an old friend, who has now left us—Charles Norton—in a very nice flat in a 16-storey building, and we looked down on the roof of some big building which had been erected thirty years before and was entirely overshadowed. That change of character was due to the want of zoning regulations such as the lecturer has referred to, which I believe now cover half the population of the United States in their big cities. I think that they will tend to regularise the use of buildings, and there will not be so much tendency to change from one street to another, from one shopping area to another, as there has been in the past.

The other question which, of course, affects matters very much is the phenomenal growth of population in the great cities. There, again, there is a general tendency to slacken off the increase of population in many ways—the change in the immigration laws which has reduced the inrush of population from outside, and the social conditions which are rapidly slackening off the rate of increase in the American population itself. This will all, I think tend to stabilise matters more in the future.

Looking from the point of view of the kind of life that people want to live, I very much question whether, permanently, it is either desirable or wholesome for humanity to live in a condition in which rapid change forms such a predominating element in life. I doubt if it is healthy, I doubt if the human animal can keep pace with such change, can digest the changes, can accommodate himself sufficiently rapidly to them. I think all this will tend to the gradual stabilising of conditions in America to a greater extent than they have been stabilised during the last hundred years that we have had the opportunity of studying them. I think that much that the lecturer has said to-night about the architect being a sculptor of masses is of great value

to us in the matter of design. Nobody can be more thoroughly overcome with admiration for the triumph that American architects have made of the new types of buildings than I am ; nobody, probably, is less anxious to see that type of building adopted here. I do not believe that the future is going to rest with the intense concentration of great masses of people on small areas of ground, such as we see in parts of New York ; I believe, personally, that in spite of all that is done to minimise the disadvantages, the disadvantages do, in life generally, outweigh the advantages. I do not believe that in our country we could possibly deal with the traffic problem. It yet remains to be seen whether Americans can deal with the traffic problem, and whether the solutions put forward will be adequate. It is easy to say that you double or treble the area or the width of your street ; it is easy to say that you separate the walking people from the riding people, and that this increases the efficiency of the street by two, three, four times. Of course it does not. The fact is that the increase in efficiency of the street depends far more on the interruptions than on the width, and a street which will carry two lines of traffic running freely, with good long lengths without interruption, is far more efficient than one which will carry six or seven lines if they have to be interrupted at every cross street. I know a great deal is being done in New York to synchronise the signals and to apportion the time of stoppage to the need at the cross street ; but all that I saw in New York, and all that I have heard since from my son, who has spent a year over there studying this problem, and from others who have come over, leads me to doubt whether they are in sight of any solution of their traffic problem, and whether they are really on lines which are going to make of that great city a place that is really wholesome and comfortable to live in. I think, also, that very much the same difficulties will be found in separating foot traffic from vehicular traffic. After all, there is in our streets—there must be in all streets if they are to be effective—a very rapid interchange between foot passengers and vehicles. What you want is to be getting a short ride in a vehicle, and getting out again on to the footpath ; and if you have to go up and down a flight of steps every time, it will be a very great trouble. You are constantly getting out of your motor car and going into a shop, and then walking on to the next shop. The two kinds of traffic are not separate, they are complementary to one another. And we find here, owing to our greater slavery to custom, a great difficulty in getting the people to go up and down steps ; they will risk their lives in crossing the most dangerous of our streets rather than go down a few steps and up on the other side. The separation by putting foot passengers on one level and vehicles on the other is only a partial solution, and would be

found, in fact, to be one causing very great inconvenience.

None the less, I do not want in the least to say anything which is discouraging to this kind of imaginative study of the problem. The problem is one which we have not solved over here, admitted ; it is one we are all studying, and which we have to study with a great deal of intensity in London. We have advantages and disadvantages as compared with New York. New York has something like ten or twelve avenues running north and south on Manhattan Island, each of which is 100 feet wide. We have no such street in London, we have not even a few hundred yards of such a street in London. I think the average width of the streets and by-ways in the inner area of the City of London is nearer 30 feet than 100 feet—as a fact I believe it is 28 feet. To attempt to increase the height of buildings, which increases the demand on the streets in a far greater proportion, is, I think, courting very great disaster in our traffic arrangements, and it will not be easy to solve the problem.

On the other hand, we have very great advantages over New York in that we do not have such a multitude of cross streets. A bus gets free at Trafalgar Square at an awkward corner and then it has a pretty good run down Whitehall before it meets with a cross street which need arrest its progress. You do not find any place along a New York avenue where such a run is obtainable ; I do not know at how many places it would have to stop and wait for traffic, but at very many ; and that minimises largely the effectiveness of the wide avenue for carrying traffic.

These are important considerations of a practical kind. I apologise here for dragging them in, because we have seen very beautiful and wonderful pictures of triumphs in the art of building, which we all admire and which we all, I have no doubt, envy in relation to those architects who have the opportunity of carrying them out. It is very natural that we should like to tackle such buildings, but I do urge that we should build in this country under our own conditions and our own traditions ; and while we can admire and rejoice in the enthusiasm and the imagination which is leading the Americans to make these vast experiments in their great cities, we should be very cautious how we try to imitate them in the conditions which prevail in this country.

It gives me very great pleasure to propose this vote of thanks to the lecturer for the charming evening that he has given us, for the inspiration he has imparted to us ; he has shown us the exercise of the imagination in the many interesting pictures he has shown us, not forgetting the very charming and beautiful building which he has contributed to our Strand, and which I hope we may see completed on the lines which he showed us in the sketch. And I think we may express

our gratitude to him for having considered the traditions of design in our streets, as he suggested he did, by altering the design. That is a piece of consideration for our own native traditions for which I think we ought to express special gratitude.

**The CHAIRMAN :** I have very great pleasure in asking Mr. Ernest J. Brown, Director of the London Master Builders' Association, to second this vote of thanks.

**Mr. ERNEST J. BROWN** (Director, London Master Builders' Association) : Though I am a layman, to me Mr. Corbett's lecture has been extremely interesting, but, may I say it with every respect to our lecturer?—most disappointing. I was hoping we were going to learn from it how to build in this country at lightning speed and at half the present cost, and without any trouble in the building industry with regard to payment by results, and that sort of thing, matters which are, at the moment, extremely interesting to me. I was hoping we were going to hear how it was that in America the operative and the builder can pick up a very large sum of money at very small cost in labour, everybody being satisfied. We want to hear how it is everything in America is so well organised that when the foundations are commenced on a site such as those in New York, nobody has to wait five minutes for a plan or a detail; it is all mapped out from the start, and goes straight on from start to finish. I am told that in some instances the building contractor has never seen the architect during the whole course of the production. Those are points of very great interest to the builders of this country, and to our friends the operatives.

We appreciate a lecture of this character; it is not above the head of the building trade employer, or that of the building operative. We have learned something to-night, and when I say we have not learned what we had hoped to, that does not detract from our gratitude for the interesting lecture which Mr. Corbett has given us. I cordially second the vote of thanks which has been proposed by Dr. Unwin.

**Mr. HERBERT WELCH [F.] :** You said, Sir, that as far as these steel structures in America are concerned, you have not yet been enabled to estimate their lives in terms of centuries. We have been given to understand that the life of such structures will never approach a century. Is it true that buildings of this character which have been erected 20 years and where inspection has been practicable, partly or entirely, have shown serious signs of disintegration? If that is so, do those buildings, after a short time, tend to become comparatively unsafe?

**Mr. CORBETT** (in reply to Mr. Welch) : The only knowledge we have of the durability of steel buildings comes from taking down steel buildings which have been erected. One of the oldest steel buildings in

New York, built 20 years ago or less, of 22 storeys, at the corner of Wall Street, was taken down, not because it was unsafe or because there was any evidence of failure in the structure, but because a new building was needed on the site. When this steel has been taken down and exposed there are sections which show rust. When steel is used in construction there must be absolute protection for permanence, and that protection depends on the workmanship at the time it is carried out. It is an uncertainty which does not exist in the case of masonry buildings. If the steel is absolutely protected from moisture and from air, there is no reason why steel buildings should not last as long as any other kind. But that factor, due to labour conditions, makes us feel a little uncertain. But, in spite of the height of these buildings, if a failure should occur, it would not be a serious failure; I do not think it would be possible for a steel building to collapse. All that would happen would be that rust would occur at one point, and there would be a yielding, a giving, at that point, and it could be easily discovered in time to correct it and save the building. That is true, too, to an extent, of masonry, but not to the same degree. So we are not threatened, in our steel buildings, by any thought of calamity from failure. Our buildings go out of date, not because of construction, but because they lack mechanical equipment and the facilities which the modern inhabitant in our cities demands.

**Mr. H. V. LANCHESTER [F.] :** I have appreciated most highly the very interesting lecture we have had to-night. When I came I had the idea that it would be on somewhat other lines, but I feel it is an inspiration to have heard so strongly emphasised the attitude of the architect towards building in the mass as that of the sculptor. In this country we are liable to think of building too much as detail and ornament, and these pictures which have been shown to us constitute a very wholesome corrective to that idea. We can see there is a lot to be done with architecture. We shall have to appreciate more and more keenly, with the new materials which are coming along, that we must look at our buildings more as sculptured forms in the sense of light and shade rather than decorative or coloured detailed work. We are all apt to look on one side only, and it has been given to us to-night to see that there is this other aspect opening before us.

**Mr. H. J. ROWSE [A.] :** When Mr. Corbett gave us the Bush Building here we felt we had come upon a very great architect, and having heard him to-night we can be sure of it. There is one point which perhaps many of us have missed. Mr. Corbett has shown us that there are two schools of thought in England at present: one which says we should tear up all that we have had left to us and should start again and do something new. The other says we should follow

tradition. Mr. Corbett shows that the conditions that govern our architecture will make it. Mechanical devices will play a greater part in building work in England in the future, and I think we ought to pay increasing attention to this side of our work.

Mr. J. MURRAY: We frequently hear, on this side, that the building operative in America is, comparatively speaking, a wealthy person, that he has big wages and does a tremendous amount of work. But if they had to do the work there as it is done here they would not get through more work than we do in London. It is a different form of construction there from what we have here, and I hope the day will never come when we shall have in London buildings such as have been illustrated to-night.

A phase of the lecture which has interested me a good deal is that describing zones for different businesses and professions. There is much to be said for a development on those lines here, and I appreciate what the lecturer said about the difficulty of keeping many appointments in London in one day.

The main factor to-day, I think the lecturer will admit, in getting development of building is to cheapen the commodity. As to how that can be done there is much difference of opinion. I do not agree it will mean the coming of the millennium if we have payment by results. There is much to be said for those responsible for conducting the industry to-day; they should get down to the facts of the situation and see if there is no better method of payment in order to get better results from the industry.

I and many more agree with the theory the lecturer spoke of, that buildings should be put up more for the use of the moment than for the use of posterity. And that, I think, specially applies to the housing of the people generally; it is ridiculous that we should be building houses to-day which people should have to live in 90 years hence.

I should like to express, on behalf of the operatives present, how great is our appreciation of the lecture which has been given us.

The CHAIRMAN: Mr. Corbett referred, in his lecture, to an early client with whom he was in considerable harmony. It is our good fortune to have in our midst a later client, the man who gave Mr. Corbett the opportunity to add to our city, Mr. Irving Bush, and I ask him if he will join in the discussion.

Mr. IRVING BUSH: Mr. Corbett and I came to London to start the original Bush House some years ago in a very humble spirit. It was said then that we had in mind the erection of something which would be grotesquely American here. We both felt that we wanted to build a building which would sink into the atmosphere of London, and, in course of time, have all the charm which your buildings have. I want to say, too, that we could not have been received more kindly

by your public authorities here, or with a more helpful attitude than that assumed by them. We felt at once that we were in the home of friends. I have often said that public authorities here have given us much better help in the work we have had to do than our own people would have done in New York. In New York we consider Corbett one of our most distinguished architects, a man who has great individualistic merit. Perhaps he has not spoken on the subject which you would have liked to hear from him, about comparative speed and cost of building here and in New York. It is a controversial question, and perhaps he felt he was in a foreign city, and that, while always among friends, he would confine himself to those flights of imagination which he has shown on the screen. In any event, I am sure he has at his fingers' tips, the facts, which he will be glad to give you if you question him, because I know, from the figures he has shown me, that he has made a careful study of the subject, and he is fully informed.

The CHAIRMAN: I, too, like Mr. Brown, came expecting to hear a talk about cost and organisation in the building industry; but when I realised that bread and water was going to be turned into cakes and ale, I abandoned myself to the feast.

You have made us realise, Sir, as I certainly have not realised before, that this architecture which we all of us profess and all follow—some with more laggard footsteps than others—is a living inspiration. And I hope that New York will long continue to develop on that particular patch of ground the ideas which have given rise to those buildings which are there now. You will not get rid of history, in any shape or form. As I looked at your picture, my mind was flitting backwards and forwards: at one time I saw cotton mills in Lancashire, and at another I was in India looking at rock-cut temples. You spoke of Venice, and some of your ideas brought to mind the Rows at Chester.

One particular thought occurred to me, and that was this: I can't help wishing you could export some of your buildings to selected centres, not too many of them to any one place. It seemed to me—perhaps it also seemed to others—that they look much finer separately than they do together, and that any one of them might be a centre of inspiration and pride to almost any place.

The CHAIRMAN then put the vote of thanks, which was carried by acclamation.

Mr. CORBETT (in reply): The Secretary asked me to remind you of the paper I prepared and gave to you here on 5 March. When he asked me to write this paper, that did not appeal to me as a subject for to-night; I personally prefer the imaginative side of architecture; there is more fun in it. We have to spend a lot of time on the structural side, but I did not feel that to-night I ought to repeat what I said in my former paper.

## Ministry of Health Housing Manual on Design, Construction and Repair of Dwellings\*

BY T. ALWYN LLOYD [F.]

This admirable publication, which has recently been issued by the Ministry of Health for the use of local authorities and others concerned in cottage building, has appeared at an opportune time, when the operations of the Housing (Rural Workers) Act are likely to be commenced in many parts of the country. We should have wished, however, that the Manual, or something like it, had been issued on the passing of the 1924 Housing Act, because it might have saved us from many of the appalling designs which have emanated from Council surveyors' offices in the last few years. In the Addison regime, when the Government took a much larger share in the financing of housing schemes, a manual was issued, and plans had to be approved by the regional officials of the Ministry. Consequently the housing schemes carried out immediately after the war were much superior to those previously done and to those which have followed since the Ministry's supervision ceased and the whole onus of preparing and approving plans has been undertaken by the local authorities.

The new Manual deals with urban as well as rural cottage design and building. There are some excellent general suggestions as to harmonising the new buildings with their sites and with old buildings, and as to local materials being used; where this is not possible, there is a warning against introducing such horrors as pink asbestos sheets into North Wales or large blue slates into a tile district. Rural cottages in open surroundings should be designed as such and not be mere repetitions of terraced houses planned for restricted frontages on urban sites. The use of sham materials and spurious decoration and bad proportions is rightly condemned, and the better way is pointed out by means of photographs and plans. Although the Manual does not recommend this course in so many words, it is evident that the Minister's intention is that architects should be engaged in housing work. Both from the point of view of the occupiers and the public, cottage designing is far too important a business to be left to the tender mercies of the builder and the Council engineer.

As regards reconditioning old cottages, which is provided for in the Rural Housing Act, the R.I.B.A. in conjunction with the C.P.R.E. (what a bewildering series of initials we are getting to with our long titled societies!) have rendered a valuable public duty in offering the services of architects to local authorities, and we all hope that good use will be made of such an opportunity.

Some of the most useful suggestions in the Manual are in relation to the repair of cottages, and if these are carefully followed there is reason to hope that the Act will fulfil its double function of improving housing accommodation and preserving old buildings.

As regards new houses, attention is mainly directed to the provision of a living-room of adequate size; the

parlour, though a very desirable accessory, should take a subsidiary place and not be worked in at the expense of the living-room. Three bedrooms are recommended as the desirable accommodation for the normal dwelling, but it is admitted that there may be a case for the building of a limited number of two-bedroom houses. We think this case is in danger of being exaggerated by local authorities at the present time, doubtless in their desire to provide new houses for the lower paid worker, who, for various reasons, has not so far succeeded in obtaining his fair share of housing accommodation. But even so, all attempts at reducing standards need careful watching, and two-bedroom dwellings should be looked upon as definite exceptions to the general rule and sustained efforts made to provide each family with a minimum standard of three bedrooms.

There is a timely reference to the possibility of newer methods of cooking and heating being introduced on an economic basis in the future, and emphasis is placed on the elimination of domestic smoke by utilising improved coke for fuel and gas for cooking and heating.

As regards site planning and roads, these vital considerations are given due prominence. In spite of much that has been written and spoken as to the advantages of developing back land by means of subsidiary roads, culs-de-sac and quadrangles, away from the noise and dangers of main thoroughfares, many local authorities and most builders still continue to build houses in "ribbon" fashion along existing roads, with disastrous effects on the countryside.

The case for more scientific, and at the same time more attractive, estate planning is here cogently stated and illustrated.

The illustrations of some of the urban and rural cottages built under recent Housing Acts go far to prove the claim which is made at the beginning of the Manual that "substantial improvement in the character and design of cottage dwellings is generally noticeable in connection with post-war housing schemes, and this result affords ground for satisfaction." In case we may get too cock-a-hoop it is also stated that "in too many cases, however, neither local authorities nor private builders have hitherto taken sufficient care to obtain good plans and designs suitable to the locality." Architects should derive encouragement from seeing such good examples of design illustrated in an official publication. In passing, we observe in nearly all cases where sash windows appear they are on the ground floor only, the upper floor having casement windows. The sash is so much superior to the casement for ventilating bedrooms that it is difficult to see why so many architects "jib" at it. These illustrations show that with inexpensive materials and without unnecessary projections, gables, and fussy detail, sound design and pleasing grouping can be attained when an architect who knows his job is engaged.

In the reproductions of house plans many types are

\* H.M. Stationery Office, 9d. net.

shown, and the notes attached to them indicate the circumstances under which they can be recommended or cautioned against. We notice a tendency in the plans to place downstairs bathrooms under the stairs, which, with two steps going down from the hall level and the restricted headroom, is not a practice to be encouraged. Many of the sculleries are too narrow—some only being 5 feet, which is almost unusable, when doors and fittings are taken into account. One or two plans show the living-room entered direct from the outside, with the stairs

opening out of the side of room ; we consider this is a mistake, as an entrance lobby giving direct access to the stairs is essential in even the smallest cottage. Opinions invariably differ on the detail of planning, but these comments are not made as a general criticism of an excellent set of plans.

The Minister of Health is to be congratulated on the issue of such a well-produced and authoritatively written publication, and we hope that much practical good will result from it.

## St. Paul's Cathedral\*

BY W. CURTIS GREEN [F.], A.R.A.

I am grateful to the Editor for asking me to review Mr. Poley's monumental work on St. Paul's Cathedral ; I imagine the most captious critic could find nothing but praise for Mr. Poley's work. After saying this, I realise that I was so much rapt up in studying the plates that I read the author's brief historical account of the building very hurriedly. The history of St. Paul's is familiar history throughout the British Empire. It is the greatest monument of the art of architecture that has come down to us from the late seventeenth or early eighteenth century.

Sir Reginald Blomfield in an introduction draws attention to the fact that this is the first time that St. Paul's has been adequately illustrated. The author states, what possibly few realise, that his drawings are the only drawings in existence of the building as it was ultimately built by Wren. And what beautiful drawings they are. They owe nothing to any clever tricks of draughtsmanship. They are essentially English in feeling, as English as is Wren's neo-Classical building. Each of the thirty-two plates is a superb example, for the most part in line, of traditional architectural drawing.

Every School in the country should possess this book. Every student who wishes to fit himself to produce architecture should study it. The Institute might well present a copy of it annually as a

prize for measured drawings. It sets a standard in this subject that is very unlikely to be surpassed.

The drawings are remarkable not only for their mechanical accuracy and beauty, but for the way the sculpture and carving is shown ; the figures and ornament are drawn with so much sympathy that they are an integral part of the material in which they are set. The plates illustrate all that is best in stone, wood, and ironwork of the greatest architect and the finest craftsmen of the time.

I have only one regret in looking at the book, and that is for the necessity for reducing the scale of some of the drawings to less than that of the originals. The west front suffers most from this, but it is not material, every draughtsman can see through it the beauty of the original. I hear that Mr. Mervyn Macartney has now completed to a large scale redrawing the isometric section through the dome made by Mr. Wm. Dunn some years ago. It would have been pleasant if this had been added to Mr. Poley's work.

It is to be hoped that the author's devoted and unwearying labour will be rewarded by the recognition that it deserves, and that his courage in publishing the result of it at his own cost will not involve him in any financial loss.

Mr. Poley has accomplished a noble task voluntarily and unaided. Without his drawings a complete record of St. Paul's would not have been in existence to-day.

In most other countries, I believe, State organisation would have anticipated this publication, although it could not have improved upon it.

\**St. Paul's Cathedral, London. Measured, drawn and described by Arthur F. E. Poley, Silver Medallist of the R.I.B.A. Printed for the Author, Willow Bank, Hampton Hill, Middlesex, 1927.*

## Review

### RECENT FOREIGN PERIODICALS.

BY GRAHAME B. TUBBS [A.]

That New York is merely a convenient stopping-place for the European architect on his way to see Chicago and the Middle West, is the contention of Mr. Lewis Mumford in an article called "New York v. Chicago in Architecture" in the American magazine *Architecture* for November. His idea is that the early work of Burnham and Root, such as the Monadnock Building, and Adler and Sullivan's Auditorium Building at Chicago, interested the Continental visitor to the "World's Fair" more than the classical buildings which made up the Exhibition itself. He maintains that it is these Americans who have inspired Modernist architectural designers, such as Mendelsohn in Germany, Oud in Holland, and Le Corbusier and Mallet-Stevens in France. This contention would not be admitted for a moment by many whose opinion is of value. A good case could be made out for tracing the latest manifestation of modernism to the *Art Nouveau* movement of the beginning of the century, or it might be contended that it is a spontaneous movement starting independently in various countries and caused through the application of science to industry and especially to building. Mr. Mumford bemoans the fact that so fresh and original a school should have been superseded by the *Beaux-Arts* neo-classicism of McKim and Hastings. Those American architects, such as Frank Lloyd Wright, who have carried on Sullivan's ideas, have been practically ignored in America, although their influence on the Continent has been considerable. The same magazine reproduces in colour a sketch, taken at Sir John Soane's Museum, of one of Adam's original colour drawings for a ceiling. The continuation of this series will be useful as a reminder that Adam nearly always used colour in his interior decoration. This is often overlooked, owing to the fact that, in so many examples, the original colour was whitewashed over during the last century, and now remains in unrelieved white, with a corresponding loss to us in gaiety and warmth.

The November issue of *The Architectural Record* is devoted exclusively to country houses. The only article is by Mr. Kocher, and deals with the architect's method of approaching the problem, and incorporates the views of several well-known practitioners in this branch of architecture. The author points out that the visit of the Prince of Wales to America in 1924 was responsible for making generally known the fact that America has "a well-developed country house life, not inferior in charm to that of England itself." The rest of the magazine is devoted to plans and photographs of recent work of this class, most of which is based either on the American Colonial tradition or on the country houses of England. The plans, for the most part, are excellently studied, both from the point of view of convenience and interior effect, and in their relationship of the house to its natural surroundings.

*The Pacific Coast Architect* for October shows photographs of San Francisco's new skyscraper, the Russ Building, by George Kelham, which is an impressive structure of great height, the centre part of which is taken up as a tower in the usual way, buttressed by rectangular masses at lower levels. A dozen or so of the plans submitted in the competition promoted to popularise wood as a house-building material, are given.

The chief feature of the November issue of *Innen Dekoration* is the new Duisburger Hof Hotel at Duisburg, by Herren Pfeifer and Grossman. The decoration throughout is in modern vein, and before deciding on its merits one feels that one must see the actual building, as much of its effectiveness obviously depends on the colours used and on the lighting, but from the photographs it looks a very interesting job. A painted music room by Prof. E. R. Weiss is fully illustrated.

Among the Continental magazines *Wasmuths Monats Hefte für Baukunst*, as usual, takes a conspicuous place. In the November number, it publishes plans and photographs of a group of schools at Hamburg and elsewhere by Herr Fritz Schumacher, also a large Government Office in the same city. They are all in brick and show a refreshing simplicity and originality of handling. The exterior of the Lichtwarkschule at Winterhude is particularly good.

*La Construction Moderne* (6 November) is given up to the new concrete railway station at Lens, by M. Cassan. This building is barrel vaulted, with ribs of concrete, the spaces between being filled in with pavement lights. The main hall is decorated with a continuous futurist painted frieze, and the wrought iron gates, which are of a simple design, are by Brandt. The concrete frames for the telegraph wires and high concrete clock tower are conspicuous features of the exterior, and emphasise its modern character, but the façades of the building would possibly have been improved by simplification.

In the following issue of the same paper, the competition drawings for a *Cité Jardin* at Tours, by M. Caignart de Mailly, are reproduced, as well as another *Cité Jardin* by M. Aubertin, which is part of the reconstruction of Reims. Both these schemes are broader and less restless in treatment than much similar work that has been done in France since the war.

The domestic work of the French modernist, André Lurçat, is illustrated in the Madrid-paper *Arquitectura*, for October. This architect's work is modern, but without many of the rather annoying eccentricities of some of his more advanced compatriots.

The Spanish American *Revista de Arquitectura* for the same month illustrates very thoroughly an expensive town house at Buenos Aires, and gives photographs of the new Golf Club House at Cumbre, which is sufficiently Tudor to prevent there being any misunderstanding as to its purpose!

Sig. Milano's pavilion on a pier at Ostia is the chief item in *Architettura e Arti Decorative*. It is covered by a dome supported by wiry concrete flying buttresses—all very thin. The interior looks rather more promising.

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## Correspondence

## AMERICAN BUILDING METHODS.

27 Buckingham Gate, S.W.1.  
7 November 1927.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—Mr. Corbett's lecture was so charming and the subsequent discussion was so entertaining that attention was diverted from one point of considerable practical importance.

The typical illustration of a skyscraper hitherto has indicated innumerable windows bathed in sunlight, a most attractive proposition for those lucky individuals who are sufficiently wealthy to occupy *front* rooms flooded with uninterrupted daylight and all the sunlight which the aspect permits.

What we seldom or never see is any view drawing attention to the absence of light and ventilation in the rear offices facing into internal light wells and occupied by typists, clerks, and subordinates who have no countryhomes in which to recuperate. It is, I think, no exaggeration to say that in any skyscraper building with internal light wells there are hundreds of office rooms from which not a speck of sky is visible from any working position.

The most striking and hopeful point in Mr. Corbett's paper—a point which attracted no comment—is that in high buildings American practice has now adopted the external in preference to the internal light well. Indentations of the outside walls rather than totally enclosed wells down the middle of the mass of the building. This conveys a striking object lesson for architects in this country.

An internal light well of the dimensions permissible under the London Building Act is nearly always ridiculously inadequate for its ostensible purpose, especially in buildings 80 ft. high with two stories in the roof. On the lower floors one is lucky to see even a tiny patch of sky from positions close to the window.

Light wells are expensive. They occupy space which might be earning rent, and, in consequence, their dimensions are almost invariably reduced to the absurd minima legally permissible.

But the same space devoted to indentations in the outer walls, permitting access of lateral light through the open side, can be far more efficient, provided the indented external wall face is not itself too severely obstructed, i.e., provided it be comparable with the case of, say, a front wall facing across a fairly wide street.

Internal light wells of the sizes at present allowed are an excellent means of *pretending* to light and ventilate back offices, and therefore of permitting the maximum amount of rental value to be crowded on to any given site irrespective of the health of occupants, who, being usually subordinates, must put up with what is allotted to them by those who pay the rent.

External light wells, even though they may really light and ventilate back rooms instead of merely making a legal pretence of doing so, must reduce the number of purely front rooms which command, as such, exceptional rents. They will therefore probably never appeal to the speculating client who looks only at next year's rent.

But to the far-seeing property owner who notes the ever-growing appreciation of the value of light, sunlight, and ventilation to the client who will consider the rental value ten years hence, external walls constitute an honest method of lighting and ventilation which architects would do well to study. It would be interesting to compare the area of office space enjoying visible sky at table height in a typical block of offices, depending upon the usual internal light wells, with the area possible with the same space devoted to external light wells.

We have so long considered obstruction merely in terms of vertical angles that we are apt to overlook the fact that lateral light can be of considerable value, especially when there is nothing else. In the company of blind men the one-eyed man is king.—Yours faithfully,

PERCY J. WALDRAM [L.]

## THE ORIGIN OF THE PENDENTIVE.

University School of Architecture, Cambridge,  
31 January 1928.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—Professor Traquair's article in the JOURNAL of 28 January is an important one. He is to be congratulated on the thorough way he has worked it out and on bringing the evidence so completely to the knowledge of the architectural student. It must have struck many besides myself that the creation of a complete pendentive dome—as is the existing dome of Sta. Sophia—at a date so soon after the tentative efforts towards the pendentive in such an important church as SS. Sergius and Bacchus called for some further investigation. Professor Traquair rightly draws attention to Professor Lethaby's conviction about the true state of affairs published in 1911 or thereby, but this does not detract from the value of the present conclusions, independently arrived at and much more completely stated. Professor Traquair seems to have proved his case without emphasising an important point in the first impression conveyed to uninstructed but critical spectators by the new dome. To quote from the contemporary account: “and this (the dome), became more straightforward and of a better curve, in every part agreeing with the line; *and at the same time not so wide, but higher*, so that it did not frighten the spectators as formerly, but was set much stronger and safer.” The italics are mine: it is a perfectly natural inference that, to the uninstructed mind, a complete dome would look narrower than a “saucer” dome having a flatter and actually wider ultimate curve.—Yours faithfully,

THEODORE FYFE [F.]

## R.I.B.A. FORM OF CONTRACT.

Bank Chambers,  
214, Bishopsgate, London, E.C.2.  
31 January 1928.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—At the Special General Meeting held on 25th inst. I raised an objection to Clause 19 as far as it affected the retention fund, which is to be limited to 5 per cent.

I suggested that this should remain at 10 per cent. as heretofore.

The architect is obliged to take into account all materials delivered. There is nothing in the bill of quantities to

guide him in valuing same, therefore *prima facie* he would be expected to accept the invoice value to the contractor. If the contractor, to suit himself, has not purchased same in the cheapest market and the materials dumped on the job are extensive, the 5 per cent. margin puts the architect in a dangerous position were the works stopped by the contractor.

The 5 per cent. margin is too fine to cover the contingency of having to call in another contractor to complete the work.

The contractor is to take steps to see that the materials are properly stored or protected from the weather or other casualties.

This would be done at the time as being contingent on obtaining the architect's certificate, but materials are often damaged or allowed to become exposed, with the result that a contractor called to finish a contract might reasonably refuse to undertake the liability to execute work to the architect's satisfaction with the aforesaid materials. The architect would have to decide either to permit the "defective" materials to be used and put up with the result, or order the materials to be removed and others substituted. In the latter event, would the 5 per cent. retention fund always be sufficient to cover this contingency?

This, apart from the fact that the contract price may be low, in which event there would arise the possibility of being unable to get another contractor to complete the work within the contract figure.

I had a number of other points in mind, but other members had already dealt with them.

In conclusion, it appears that the honour and dignity of the Institute is at stake, and that, as matters stand, the only thing to do is to endorse the recommendations of the Council.

If the position had been thus put I should not have raised any objection.

I feel, however, that members should have been con-

sulted and their views obtained at an earlier stage, and suggest that in the future the rank and file be given an opportunity of knowing that to which they are being committed.

In this matter I, for one, shall consider myself free in practice to amend the contract. The contractors would, as usual, have the opportunity to inspect the draft form of contract before tendering.—Yours faithfully,

G. G. WINPOURNE [A.]

#### M.R. ROBERT ATKINSON ON ARCHITECTURAL BOOKS.

Mr. Robert Atkinson, the Director of the Architectural Association School of Architecture, on 25 January, read a paper on "Architectural Books." The paper covered much larger ground than was suggested by the title. It was in fact a pretty formidable bibliography of architectural literature delivered in a manner which is characteristic of Mr. Atkinson, that is to say, it appeared scarcely more than a gossip on books; the intimacy of the reader with his subject was so complete that it concealed the knowledge and research which underlay his easy comment. Although Mr. Atkinson's talk lasted considerably over two hours, the time passed so quickly that only the clock discovered its passing. We hope on another occasion that Mr. Atkinson will not attempt to cover so much ground, because we should like to hear him discourse more at length on the influence of literature on the various phases of architecture. Mr. Atkinson as a whole, we think, seemed to come to the conclusion that the literature of architecture was an outcome of the architectural expression of the time. It might, perhaps, be argued from sufficient enough evidence that certain phases of architecture were, to some extent, the outcome of certain publications of the time. R. D.

## R.I.B.A. Form of Building Contract

### Report of Special General Meeting, 25 January 1928

(MR. WALTER TAPPER, A.R.A., PRESIDENT, IN THE CHAIR).

The PRESIDENT: You know, of course, that this is a Special General Meeting, called to receive the recommendations of the Council on the report of the Conditions of Contract Conference; to adopt the Form of Building Contract agreed between the representatives of the Royal Institute of British Architects, the Surveyors' Institution, the National Federation of Building Trades' Employers, and the Institute of Builders, and approved by Sir William MacKenzie, K.C. (President of the Industrial Court), chairman of the Tribunal appointed by the Conference; and to withdraw all previous Forms from circulation. I will call upon Mr. Maurice Webb to move a formal resolution.

Mr. MAURICE WEBB [F.], vice-president: I beg to move this resolution:—

"That the Form of Building Contract agreed

between the representatives of the Royal Institute of British Architects, the Surveyors' Institution, the National Federation of Building Trades' Employers, and the Institute of Builders, and approved by Sir William MacKenzie, K.C., be adopted, and that the Sub-Drafting Committee of the Conditions of Contract Conference be empowered to make any minor corrections therein that may appear necessary.

"Further that all previous Forms issued by the Royal Institute of British Architects be withdrawn from circulation."

I do not think you will expect me to say very much in respect of that resolution, but I do want to emphasise the real importance of this occasion, and also to emphasise the great care that has been bestowed on this document which I have in my hand. Perhaps for the benefit of

those who are not aware of the whole history of the proceedings, I may be allowed very briefly to run over them.

As you know, after the war the builders all through the country became very dissatisfied with the 1909 Form of Contract which hitherto had been in general use, and I think I can also say that many architects had certain qualms that that contract was not as fair as it might be made towards the contractors. The result was that we tried to come to some agreement with the builders, and could not at the time. We prepared a new Contract Form called the 1920 Form, and they prepared a Form of their own called the Building Code. Those two Forms differed as the Poles asunder. They bore no relation to each other. Neither of them was ever seriously used, as far as I know, and we had to continue with the 1909 Form.

About seven years ago the contractors approached us and we agreed to see whether we could not come to some settlement of this question which is, was, and always will be, a matter of the greatest importance to the building trade. An agreement was reached that we would send representatives to a Conference with the contractors and the President has given you the names of the bodies and societies represented at that Conference. We made a binding agreement to this effect: that the Conference should agree, as far as it could, and that any points in dispute upon which we could not see eye to eye with the contractors should be referred to an independent arbitrator, Sir William MacKenzie, who was recommended by the Government of the day. This was a binding agreement. That Conference met, I think, seven years ago, and for five or six years they were continually working on this Contract. They appointed a small Drafting Committee to go into the whole thing in detail. After five or six years' hard work many of these clauses were agreed, but one or two outstanding points could not be agreed, and the question then arose: Should this be referred to the arbitrator or should we break up the Conference and break off the negotiations? That question was put to the Council of the Royal Institute of British Architects, and it was obviously a very important thing to find out what our position was. We took our solicitors' advice, and we took counsel's advice, and we were told that under the agreement we had made at the beginning of the Conference it would be a breach of faith on the part of the Royal Institute of British Architects to break away without referring the disputed clauses to the arbitrator. That was a position that, as a Royal Institute, we could not possibly face, and we therefore decided to try once more to come to an agreed Form on all points, and for that purpose both ourselves and the builders enlarged our representation on the Conference. We brought in architects and they brought in builders from different parts of the country in order to have the opinion not only of London men but the general opinion throughout the country. That Conference appointed a new Drafting Committee on the same territorial basis in, I think, July last, and after a period of six months' work the document was substantially agreed, and the Contract was eventually put in the detailed form in which we have it now by a smaller committee of four: Major Barnes and Mr. Searles-Wood on our side, and Mr. Easton (Lord Mayor of Newcastle), and the Secretary of the Master Builders' Federation on the other side.

The point is that we entered that Conference agreeing definitely to accept the results that came out of it, and that if we could not agree on any particular clause we would accept the award of the arbitrator. Fortunately, I think, it never was necessary to go to the arbitrator. We came to agreement on every clause in the Contract but we thought that it would be advisable that Sir William MacKenzie would be good enough to express an opinion on this Form. I expect you have all seen in *The Times* lately that he did express an opinion, and his opinion was that it was an absolutely fair document and a great achievement on the part of the builders and the Institute. That is the history up to this moment.

I do not propose to go through the document, but, of course, there are two main points of difference between it and the old 1909 Form. The principal difference is the extension of the arbitration clause to materials and workmanship condemned by the architect. In dealing with that clause, as with all others, this new Drafting Committee worked on a very simple formula. It said at its first meeting: We will look into every question that is raised on these lines: Is what we are proposing fair to the building owner and to the builder, and is it also fair to the architect who has to interpret it? Well, we came to the conclusion that it is not fair that an architect should be able to condemn materials and workmanship and that the builder should be obliged to suffer possible pecuniary loss, whether the architect is right or not in his condemnation, without any power of appeal to anybody. That being so, we agreed that it was necessary and that we ought in common fairness to the contractors to extend that arbitration clause. But in doing so, we had made clear that the powers of the architect as regards condemnation are, if anything, rather stronger than at present. The builder must immediately remove any materials or workmanship that are condemned by the architect without any possible question, and he must do it forthwith; but if he feels that he has suffered loss, then he has the right of calling in the arbitrator to decide. I hope that has made that clause clear, because it is a vitally important one.

Another major alteration since the last Contract is the question of injury to buildings, and that really arose through some of the accidents that have happened in London lately, it being felt that it was hard on the contractor to be responsible for enormous sums of damage through, possibly, no fault of his own, and also that under the present Contract the building owner is not particularly well protected. The builder takes responsibility for damage, but the damage may conceivably be bigger than the builder himself can stand. So that under the new Contract he takes full responsibility for his negligence and insures against it, and the building owner can, if he likes, insure against any other possible causes of such injury or damage.

I do not think I need refer to any further clause in the Contract, but I do wish to make it quite clear that the Royal Institute of British Architects has pledged itself, and gave its representatives on the Conference plenary powers, to settle this matter, and the purpose of this meeting is to ratify the agreement. It has been ratified by the builders; it now remains for us to do the same.

Mr. HERBERT T. BUCKLAND [F.] : I shall have very great pleasure in seconding the resolution. I have served on the Contract Committee almost since its inception and although I have not been on the Sub-Drafting Committee I have attended quite a number of the meetings. Since the Contract has been issued to the members, no doubt everybody has considered it and has registered his personal views with regard to it, and, I have no doubt, has found points to which he takes exception. But I think what one would like to do is to ask everyone who has done that to consider the position, and also the situation of the Committee that was entrusted with the task of agreeing the Contract. You will probably know that several well-known London members of the Institute were on the Contract Committee and that the allied societies were represented and also a number of their members were on the Committee; and then, finally, you had as a lawyer, Sir Lawrence Tooth, who showed himself an extremely capable chairman. Moreover, you have the opinion of Sir William MacKenzie who said, after perusal, that the Contract was a notable achievement. I think, gentlemen, with all those opinions before you, any one who has small personal views in regard to it has got to give way to the weight of opinion, legal and professional, that has been brought to bear upon this. I do hope this meeting will bear that in mind and vote, if possible, unanimously in favour of the Contract in order that it may go out into the country as being unanimously approved by the Royal Institute of British Architects and its members.

The PRESIDENT, having read the resolution as moved, declared the matter open for discussion.

Mr. W. GILLBEE SCOTT [F.] : After what we have heard—and one fully understands the position—any criticisms that we may make of this document of necessity seem to be rather beside the mark because evidently, after all the time and labour that have been spent upon it, it would be very difficult to do anything else than approve it. But at the same time, possibly objection will not be taken if we offer a few criticisms as they may happen to occur to us.

Mr. P. M. FRASER [F.] : May I speak to a point of order? Do I understand, sir, that we must adopt these Conditions of Contract?

The PRESIDENT : It is open to the General Meeting to say.

Mr. GILLBEE SCOTT : I have not had time to study this document and know it as well as those engaged in preparing it. I did not quite follow Mr. Webb's criticism of that clause with regard to the approval of workmanship and materials. Is it the case that the architect is absolute at the time and that his word goes, notwithstanding any objection of the builder, but that later on, or at the completion of the work, the arbitrator may be called in? Or is it open to the builder, if an architect condemns a crowd of bricks, at once to call in the arbitrator and ask his opinion upon it?

Mr. MAURICE WEBB : Yes. But he must remove it if the architects insists.

Mr. GILLBEE SCOTT : He must remove it. That is what I meant. If the architect strongly objects and condemns it, must the contractor then immediately call

in the arbitrator, and if he does not do so, does the question go then?

Mr. MAURICE WEBB : Yes.

Mr. GILLBEE SCOTT : It cannot be brought up again at the end?

Mr. M. WEBB : As I understand, no. If he does not object within the time specified, then it cannot be raised again at the end.

Mr. MAURICE WEBB : Any criticisms that are made this afternoon can be put before the Drafting Committee on points that are not vital questions of principle.

Mr. W. GILLBEE SCOTT : I notice in Clause 5a that the fees for settling contracts are to be paid by the contractor if he has received the money. In the old Contract the Quantity Surveyor was to be paid his fees before the final certificate was given. That does not put the Quantity Surveyor in as good a position as he was.

Mr. MAURICE WEBB : The Quantity Surveyors have agreed to that.

Mr. W. GILLBEE SCOTT : The next item is only clerical. The last page is headed "Appendix," but referred to as a Schedule.

Mr. MAURICE WEBB : That is only a printing error.

Mr. W. GILLBEE SCOTT : Quite so. Then in Clause 12, apparently the responsibility for the setting out of the works and the checking is to rest upon the architect. It seems to me that if a builder undertakes to put up a building according to certain drawings and specification he should do it. Why should the architect have to go and measure whether a thing is 51 feet 6 inches or 51 feet 9 inches? The builder has undertaken for a certain sum of money to make it 51 feet 9 inches, and he ought to do it; if not, he ought to be held responsible. I think it is entirely wrong to send the architect round with a 5 foot rule, rods and tapes to see if the builder has done what he has undertaken to do. Those clauses may be a very serious problem to the architect later on. He cannot go round every time he goes to a building and check off little dimensions; and then the builder says afterwards, "Well, it was open to you to measure and check it, and you did not do it; now that has to stand where it is." I think that is important. We ought not to have given way on that point.

Mr. MAURICE WEBB : The intention of that clause is that the contractor shall be given the site and the architect should be responsible for the boundaries of the site. It does not mean every single little dimension.

Mr. W. GILLBEE SCOTT : It does not say so.

Mr. MAURICE WEBB : That is a point that we shall put to the Drafting Committee. It will come under the resolution.

Mr. W. GILLBEE SCOTT : I quite agree that we ought to define the site.

Mr. T. DOUGLAS SCOTT [A.] : We do not approve that until we see it again.

Mr. MAURICE WEBB : That is another point.

Mr. DOUGLAS SCOTT : That rather alters the case.

Mr. GILLBEE SCOTT : I quite agree that the architect ought to point out to the builder where the site is and take the responsibility of defining the boundary. But it is quite different to identifying the exact boundary of the site and the building, as this certainly does.

Mr. MAURICE WEBB : It says " main building lines and boundaries."

Mr. GILLBEE SCOTT : It says "main building lines." If the site is defined I think the builder should be left to put the building up according to the drawings. After that I should make him responsible, not the architect. As to Clause 13, there apparently " Schedule " should be " Appendix "; under no circumstances is a builder to be liable for making good anything of any nature whatever beyond a maximum of six months. Now, upon that arises this point. We all know that it is absolutely impossible for an architect who only visits the work from time to time—he cannot be always there—to see everything ; it is quite possible that work may be covered up through no fault of his. It is very easy indeed to do bad work and face it up with good, and the result may not be apparent possibly until twelve months afterwards, perhaps two, three or more years. Whenever any defect is discovered under this contract the builder, after his final certificate, is absolutely free. [ "No." ] The client comes along and says to the architect, " You ought to have seen that : it was open for your inspection at the time it was being built." The builder simply flourishes his final certificate and says, " I have my final certificate ; I have nothing to do with it." Then the employer accuses the architect with negligence. The whole tendency of the Courts and the public at the present time is to consider the architect as a kind of guarantor for the builder. That is an utterly unfair and improper position to put us into. It is our business to design and specify and give reasonable supervision, but not to guarantee that the builder having undertaken for a certain sum of money to do certain work, which he does not do, is to be let off and the unfortunate architect made to pay for his default. I do think that we ought to be protected. We are not protected under our Schedule of Charges to anything like a proper extent in that respect, and I do not know if that would be considered a minor point to consider later. We have clerks of work on large jobs, but a clerk of works may let us down. I happen to have a job on now in which the clerk of works is a particularly sleepy man, and I find out twice the things he does whenever I go round. That is the position we are all in, and it is obvious how we may be let in. I think the man who is paid for the work and takes the profit for doing it ought to be held responsible and not the architect. Then with regard to Clause 14 in connection with sub-letting. A builder has, apparently, at the time of signing a contract to give the architect a list of sub-contractors whom he would like employed, and if the architect does not object to any of them, assent is understood. Of course, in all probability not one of us would know the names of the sub-contractors to whom he proposes to let his brick-work, plastering or plumbing. We are not in a position to object, and yet not in a position to assent. I think that is a rather difficult position to put the architect in. Notwithstanding that, if any bad work is done by a sub-contractor, I presume that the contractor is still liable. I shall be glad of assurance on that. Then in clause 19 (c) apparently the retention money is not to exceed 5 per cent. of the whole contract. Well, at present the usual rates of payment are 80 per cent. as the work goes along until you get to a total within 10 per cent.

of the contract amount after which you pay in full, and then you generally give the builder half of 10 per cent. retention at the end and the balance on the final. Five per cent. is not sufficient margin in many jobs. When you get a low tender and a builder takes a contract at, possibly, cost price, possibly less, if you are going to pay within 5 per cent. of his tender you may find that he is sometimes unable to finish the job, and you have nothing left in hand to do it. It seems to me that 5 per cent. is much too low. Anyhow, it is absolutely contrary to all the experience of our profession ever since I have been in it—and I am sorry to say that is a long time. I have never found any difficulty in getting builders to agree to 80 per cent. as the work goes on until it arrives within 10 per cent. of the total contract sum and then to pay them half that at completion and the other half a little later. I do not think 5 per cent. is at all a wise provision ; I should have thought that we ought to get better terms, because this is quite contrary to the usual practice. I have a large contract now in which the terms are what I mention. The contractors are perfectly willing to take it on those terms. I have not the slightest difficulty in getting any number of jobs done by any number of the best builders in London on those terms. So I do not see why we should give up all the margin which we have to hold for our clients' security. Then section (e) of 19 absolutely lets the builder off after the final certificate. It says that he is not to be held liable for any matter whatever that could have been seen by the architect, or to that effect. Well, it is quite possible it could have been seen, but the architect is not there every minute while the building is going on, and if he does not happen to be there when he could have seen it, the builder covers it up, and after that the builder is irresponsible. I would like to read a short clause which I have in a contract and in quantities also in connection with a £45,000 job, and a large firm of London contractors have signed this :—" The contractor shall uphold and maintain the whole of the works until they are complete and notwithstanding that the final certificate may have been given nor that the period of maintenance named in the contract may have expired the contractor is to be absolutely liable for and is to make good at his own cost whenever he may be called upon to do so until such time as he is relieved by the Statute of Limitations "—those are the words, and why should he not ?—" any cracks, settlements, shrinkages or other damages or defects that may exist in any part of the works and arising from "—the point is *arising from*—" defective materials and or workmanship or from any failure to carry out the terms of the contract in all respects." He is only liable for failing to carry out his contract. Once or twice builders have objected to that, and I have said, " Who is to pay, then ? Do you expect me to pay ? You are only liable if you fail to carry out your contract. Are you not prepared to carry out your work ? " I always have twelve months instead of six. Sometimes I have had objection to that, and I say : " Are you afraid to guarantee your work for twelve months ? If so, I would rather you did not sign the contract." He immediately signs—always. As I was saying, this clause was put into the bills of quantities before the builders tendered ; that job is going on and the builder has signed

the contract. That protects the architect from being sued for making good the builder's faults, and it seems to me that it is a perfectly fair clause because the builder is only held liable for his work for which he has been paid. I hope that the Drafting Committee may be able to do something for the protection of architects with reference to that particular point. In Clause 23, apparently, the contractor is to be only liable for damages to persons—

Mr. MAURICE WEBB: No, no.

Mr. GILLBEE SCOTT: I mean under section (b), Clause 23: "Provided that as to such injury or damage."

Mr. MAURICE WEBB: "Injury to property."

Mr. GILLBEE SCOTT: "Injury to property." He is not to be liable for injury to property except to some sum to be named in the quantities. Is not that so?

Mr. MAURICE WEBB: That is right and for his own negligence.

Mr. GILLBEE SCOTT: Of course, it is very difficult to put any sum into a contract. You might have to put £50,000 or £100,000, the premium upon which would be simply enormous. Anyhow, I should think we should be glad to hear those who have discussed this subject give us a little light upon what is the proper course to pursue under that clause. Our clients expect us to protect them. In any case we will have to take out a special policy, apparently, for which the client will have to pay, and then if you do not assess a sufficient sum and an accident happens the client says, "It is all your fault; you might have known that building would come down." Under Clause 25 I do not see—I may have missed it—that the client is entitled to pay sub-contractors direct if he so chooses. He could under the old contract, but I do not think he can under this. I do not know that it is very necessary that he should, but there are certain times when it may be preferable to pay the sub-contractor direct. I do not suppose the builder would object to that. It does not matter to him if he is liable for it. Possibly that is a point the Drafting Committee would consider. Then only a matter of criticism on Clause 31. Personally I think that there are too many people allowed to be arbitrators. I should certainly very much prefer that sub-section (c) be left out—as to "a local person"; I presume that has come from the provinces.

Mr. MAURICE WEBB: You can scratch those words out of your own particular contract.

Mr. GILLBEE SCOTT: We are at liberty to mark it through? First of all, you can name an arbitrator if you like; if you do not name one you can try and agree upon one, and then let us go straight on to (d) and let the President nominate two and the builder choose which he would like. That would complicate matters less.

Mr. DOUGLAS SCOTT: What about the builders selecting two instead? How is the builder protected? An arbitrator supported by the contractor—how does that apply with regard to the appointment of arbitrator by the President, who would then send, presumably, two names to the employer? It does not say so; it is all one-sided.

Mr. GILLBEE SCOTT: The point had not struck me. Then on page 15 the "Appendix." I suppose that is going to be called "Schedule"?

Mr. MAURICE WEBB: It is the other way round—the Schedule will become the Appendix.

Mr. GILLBEE SCOTT: It is eventually to be called the Appendix. It may be my want of perception, but personally I do not quite see how to fill it in. No doubt we shall all learn by experience, but possibly Mr. Searles-Wood or Major Barnes would be good enough to explain what these lines mean.

The PRESIDENT: I shall ask Major Barnes to speak at the end of the discussion, so that if you do not have any questions immediately answered it does not mean they are going to be ignored. They will be answered in due course.

Mr. GILLBEE SCOTT: May I add about that clause which I read out as being in my contracts that I have had that clause in every contract I have carried out for the last twenty years, and it has never been objected to. It has been agreed to by different builders, some very big ones. Therefore, if I can get it through others can.

Mr. C. H. PERKINS [A.]: I have just one point which I hope will be regarded as constructive criticism, and that is with regard to the use of the word "certify" in Clause 19, sub-section (c). In the second part it says: "Provided that where the amounts retained . . . total or exceed £500 then . . . upon reaching the said limit the architect shall certify." It is his duty; he must not take one of the certificate forms published by the Royal Institute of British Architects and fill that in, because the money is not due to the contractor. I suggest that that word should be "notify." My attention has been drawn to this by a recent judgment (*Wisbech Rural District Council v. Ward*) in the Appeal Court, and the Judge remarked that the word "certify" seemed to be used in two senses: one, in the sense of sums due to contractor, and in the other sense that work to that value had been done. I suggest we are sailing right into that same storm again; the word "certify" where used here should mean a sum due directly to the contractor.

Mr. BERNARD DICKSEE [F.]: There is one question I should like to ask. This Contract appears to deal solely with a Contract where there are Quantities. At the present time we have two Forms of Contract: one with Quantities, one without. A very large number of works, in fact most of a smaller figure, are done without Quantities. This Contract Form seems hardly to fit those. What proceedings have been taken to produce a new Contract Form to take the place of the old one without Quantities?

Mr. MAURICE WEBB: An alternative Form is to be drawn up following on the lines of this, but to apply where there are no Quantities. It has not been forgotten.

Mr. R. G. MUIR [F.]: I am afraid I do not like the new Contract at all. It may seem rather unkind after all the efforts made by the Committee, but I think they have been chasing a quite unnecessary sort of hare. I think the old Contract, by experience, did work provided there was straightforward dealing and fairmindedness on both sides. I think their endeavours to meet every possible contingency that may arise in the building have produced a document ponderous in size, unintelligible in parts, and I defy any layman to understand many parts of it, or many architects either. One has not had much time to consider this properly, and perhaps one's remarks are

almost unfair, but I did certainly mention this to-day to a lawyer, whose comment was that he thought that one clause had been omitted, which should be that the builder should be required to pass at least the Matriculation standard. I also mentioned the point to a Quantity surveyor friend of mine who is fairly well known, and he was most unhesitatingly against this Contract from the employer's point of view. From my point of view, I think one of the most unsatisfactory things is that the penalty clause is still left in the same unsatisfactory state that it was in the old Contract. You have still to ascertain the liquidated damages, whatever that means. You can only ascertain that by going to law. There are many damages an employer may have to put up with which cannot be ascertained. That is by the way, and I question whether anything is going to deal with that. It says in Clause 5a : "The said Bills of Quantities shall be deemed to have been prepared in accordance with the Standard Method of Measurement of Building Works last before issued by the Surveyors' Institution." I think I am fairly accurate in saying that hardly a single surveyor in London exactly follows that Standard Method, and that any surveyor in future, if wise, would put at the top of his Bill of Quantities that this was not measured in accordance with it. I reiterate the statement that I am sure the majority do not follow it, and I do not see why we should be obliged to compel the surveyors to follow something they do not want to. There is a curious statement in Clause 6 (c) that "then in accordance with the local day-work schedule of the Building Employers' Association for the district." Most of these building employers' schedules embody 33½ per cent. profit. They are not cost prices at all. In other words, you are binding your employer to pay 33½ per cent. profit on day-work whether he agrees or not, or whether it is fair or not. I do not know whether that point has been borne in mind, but I think it is a dangerous precedent to put yourselves entirely in the hands of the local building Employers' Association. I read Clause 6 (c) and I did understand it after a time, but I venture to suggest this : one knows there are unfair cases where a large amount is knocked out of a contract and the builder suffers loss. I think most architects have met a man in a case like that. If, on the other hand, a man has a contract for £10,000 and is practically immediately increased to £20,000, is he to be paid on the same rates or is he to allow 7½ per cent. off the rest ? It has to work both ways in fairness to the employer. If he is allowed something for his loss of profits on what he is using in his contract he ought to give something to the employer for things handed in. Under Clause 7 the architect now has to furnish the Contractor with one copy of the drawings and two copies of the Specification and Bills of Quantities, and then it says : "The Contractor may have further copies of the same on payment of the prices stated in the Schedule." Further, I think it is playing rather low to have brought that into the building contract at all. It is almost impossible to say what is the cost of a drawing. How can you say what the cost of a drawing is ? It may be a large 1/8th scale drawing or small, or detail. How can you fix an average value ? It is impossible. Supposing, on the other hand, the Contractor wants at a later date a further set of Bills of Quantities, we all know they are lithographed.

Are you to set up further Bills of Quantities to be specially lithographed for the Contractor ? And then it is not clear as to how many Bills of Quantities he wants. Does he want two apart from one he already has, making three altogether ? I agree with very much that was said by the speaker who condemned the architect being responsible for the setting out of the works. It does apply in the north of Ireland as I have found to my annoyance. The words in the last part of Clause 12 : "the Contractor shall be relieved of all responsibility" seem rather a sweeping statement. I do not quite see what is to prevent the builder deliberately setting a thing out wrong in the hope that the architect will not see it. According to this clause he is relieved of all responsibility. Then there are one or two further remarks. I do not quite see why you want to bring in the last paragraph of Clause 24. It seems an unnecessary and perfectly useless thing. It is only lumbering up an already cumbersome and burdensome document. It does no good to anybody as far as I can see. Clause 30 is a very dangerous item indeed. The contractor is apparently not to be liable for any damage for Extraordinary Traffic Expenses unless it is due to the use of improper vehicles, and who is going to see the vehicle ? If you have a man standing by to see they are bringing the stuff to the work in proper vehicles, how is it to be checked afterwards ? It must be a proper vehicle, it seems to me, if it is not to damage the road at all. I think that could, with advantage, be left out.

Mr. G. G. WINBOURNE [A.] : With reference to Clause 19 I suggest we should be paying 10 per cent. retention. In issuing the Certificate you have to take into account all unfit materials on the site. If the contractor should not buy his materials judiciously the 5 per cent. in my opinion would not allow sufficient margin to complete the Contract, if, as might be the case, those materials allowed for and which were not fixed and of which we had no record in the Schedule, were, as I say, bought at a higher price than allowed for in the contract price.

Mr. R. G. MUIR : Is there not some confusion about this 10 per cent. ? In the Appendix there is mention of 10 per cent. retention to the end of the job, and then 5 per cent. for the maintenance period. The Appendix deliberately mentions 10 per cent., which is the normal retention, and 5 per cent. for maintenance period.

Mr. BERNARD DICKSEE : Limited retention fund stated as being 5 per cent.

Mr. MAURICE WEBB : After it reaches 5 per cent. the retention stops.

Mr. P. M. FRASER : If the resolution can be altered I would like to have it amended by the inclusion of the words "if approved, to adopt the Form of Building contract,"—"To receive the recommendations of the Council on the Report of the Conditions of Contract Conference and if approved to adopt the Form of Building Contract." Am I in order in moving that ?

The PRESIDENT : I think that would be in order. I think we could agree to that.

Mr. DOUGLAS SCOTT seconded.

The PRESIDENT : You are moving an amendment ?

Mr. FRASER : Yes. As to the amended resolution I would like to make those remarks. I do not think the statement which appeared in the JOURNAL is quite so full. . . .

The PRESIDENT : One minute, Mr. Fraser. Do I understand you are moving an amendment to this resolution, or is it an amendment to amend the resolution, in that respect, in four lines?

Mr. FRASER : I would like the resolution amended if the Council would agree.

The PRESIDENT : Do you object to that, Mr. Webb?

Mr. M. WEBB : I do not quite see the effect of it. If this meeting does not approve —

Mr. GILLBEE SCOTT : It comes to the same thing either way.

Mr. T. T. REES [F.] : On a point of order. If approved — does that mean that if it is not approved it is going to fall to the ground, because I should certainly object to that.

Mr. FRASER : That is practically what I mean.

Mr. REES : Then I should have to vote against it. We want to help, not destroy.

Mr. FRASER : I am not at all particular. I will drop it.

The PRESIDENT : Very well.

Mr. PERCY THOMAS [F.] Vice-President : I thought perhaps it might clear the air if I let Mr. Fraser and some others know that I do at a later stage propose to make an amendment. I do not propose that we should turn this down, but I do propose an amendment that we should have time for further consideration. I feel the majority of members of the Institute will consider that that is a fair request to make. They have had something a little over a week for this, and I think, without any disrespect to any obligation which the Council may have entered into, it is within the power of this general body to allow them further time to consider a matter which is vital to every architect practising.

Major H. C. CORLETT [F.] : We can only accept or reject it. It might be best to adjourn the meeting so that we may have more time to consider it.

Mr. FRASER : In the notice which appeared in the JOURNAL following this resolution it says, "in the course of outlining the history of these Conditions the work of the Committee proceeded and in order to give the provinces more representatives . . . the Committee was reconstituted in July last." I take it that reconstitution was not done by the Committee themselves. It consisted, I am credibly informed, of leaving out at the new session all those members who showed their teeth during these considerations. I know that three late Chairmen of the Contracts Committee who were on this Conference are now not on it. I have a few Conditions of Contract in my hand. There is one called "1920" which bears these words : "Approved by the Council of the Royal Institute of British Architects." If the Council of the Royal Institute approved this document, how can they approve this one that has been bled pretty white? It is, I think, the most emasculated document I have ever read. The only active clauses in it are those which make the architect's life a perfect nightmare and remove entirely from the building-owner any recourse to justice in case of default on the part of the builder. So far from being in lucid English, it abounds in gross grammatical errors. If the word "Schedule" means "Appendix," and if "Appendix" means "Schedule," I think it ought to be

stated somewhere. I seriously suggest that all these definitions should be cut out. They are cumbersome and foolish; they do not appear in documents of this kind as a rule. "Notice in Writing," or written notice shall mean a notice in written, typed or printed characters." Utterly ridiculous! How can a notice sent by registered post be in anything but "written, typed or printed characters?" It is most dangerous to define site, as I know to my cost. Why is not Clerk of Works defined? He is a most important person; he is left out altogether; though "Site," "Surveyor," "The Appendix," and "The Contract" are all defined. And then in Clause 2, line 3, I suppose the following is put in for the sake of clarity : "the Contract Works" in inverted commas. Why? Is that a term which is defined somewhere which I have not been able to discover? Does it appear in the Appendix or Schedule? Then there seems to me an important point in line 6, Clause 2: "written matters are hereinafter collectively referred to as 'Architect's Instructions.'" I strongly object to an architect having to write every instruction he gives. It is absolutely impossible and undesirable and dangerous. In sub-section (e) Clause 2, "The dismissal from the Contract Works for good and sufficient reason of any person employed thereon." These words are not in the 1909 Form. I suppose if I find a man in a state of intoxication on the works, I must write and say, "Such and such a man was drunk and must be removed." I may not say, "This man must be removed" but "must be removed because he was drunk"; in other words, a libellous statement for which I would certainly go to court and be mulcted in heavy damages. The greater the truth, the greater the libel, I suppose. Near the top of p.4 it says : if the Contractor acknowledges verbal instructions, and so forth, within seven days of being given. Why within seven days? It seems to me that the architect gives the instructions in writing or verbally for a substantial omission. If the contractor does not acknowledge those instructions within seven days, under this clause there is no omission. You cannot claim an omission later on. You have to have the contractor's admission that there is an omission. If it is an extra the contractor will write by return of post and say, "Yes, you are quite right; it is a nice extra." If it is an omission he forgets to answer within seven days, and that omission cannot rank as a Variation on the Contract as it is worded. It may not be what is intended. And then the last sentence of Clause 2 : "Figured dimensions are to be preferred to scale." Surely that is not an instruction or direction or binding covenant. I cannot think why you have dropped out something which is time-honoured and put in something which is emasculated or at least stupid. It does not mean what it says, anyhow. There are several cases in which the wording is extremely bad. Line 5, Clause 4: "and or the expense" which makes it read "shall pay him the price of . . . the expense." That sort of thing should not be.

Mr. MAURICE WEBB : That is word for word out of the 1909 Contract, I am told.

Mr. FRASER : I do not think so.

Mr. FRASER, having been referred to the 1909 Contract, p. 1, Clause 4, continued : I thought we had

left that. It says "Figured dimensions are to be preferred to scale," not to be followed. How can you say to a contractor, "You are to prefer figured dimensions"? That is an alteration of wording which emasculates the whole meaning. Everything is done to spoil something which we know is good and sound.

The PRESIDENT : Mr. Fraser, you have heard from Mr. Webb that any matters of that sort will be considered. If you can go to the big matters it will expedite this meeting.

Mr. DOUGLAS SCOTT : But are we going to see them again?

Mr. FRASER : We are told we are not going to see them again. My life is at stake here, Sir.

Mr. W. HENRY WHITE [F.] : Are we going to see them again? May we have an answer?

Mr. BERNARD DICKSEE : I have had a good deal of experience in drafting Building Acts and I know that slipshod drafting causes incalculable mischief. I think drafting is very important indeed, and it should, therefore, receive all the consideration it deserves. It is not sufficient to say that will be put right. It is a question of what a Judge would interpret the words to mean.

Mr. W. HENRY WHITE : May we have an answer to that?

The PRESIDENT : Is it possible to give an answer to that? That they should see this document before it is finally approved?

Mr. PERCY THOMAS : Would it simplify matters if I put my amendment now? I move "that this meeting be adjourned so that every member can have an opportunity of further considering this new Form of Contract, until such time as you shall call the meeting again in a period of, say, six weeks, so that there will be opportunity for those in the provinces to have meetings and express their views without in any way interfering with obligations which the Council may have entered into." I formally move that.

Major CORLETT : I second that.

Mr. MAURICE WEBB : As the proposer of the resolution I will accept that. I suggest the meeting should hear Major Barnes before breaking up, because he has taken an immense amount of trouble over this, and he really feels that the honour of this Institute is very largely at stake. The way in which we handle this matter now is really important for the credit of the Institute itself, and I should like, if the President will permit, Major Barnes to have a chance of saying what he feels about it.

Mr. GILLBEE SCOTT : May I suggest before Major Barnes speaks that it might be advisable to let those who wish criticize the document a little longer, so that the Committee would have more to consider?

The PRESIDENT : I think it would be better under the circumstances that there should be quiet meditation on the subject. We can consider it at home and then come with something tangible.

Mr. C. F. WARD [F.] : I am speaking on behalf of the Institute. I do not know whether the Drafting Committee have fully consulted the various departments of the Government and Municipal Authorities who are deeply interested in large building contracts. If I might throw out the suggestion, would it not be advisable to

get in touch with those Authorities, and possibly in the case of Local Authorities with the Municipal Corporations?

The PRESIDENT : We will get the Committee to make a note of your suggestion.

Mr. WARD : That this contract shall go out as one Contract for the whole country, because I am perfectly certain as it stands Local Authorities will not adopt it.

Mr. T. T. REES : May I claim attention for one moment as coming from Liverpool to say that we would endorse what Mr. Thomas has proposed and Major Corlette seconded. We know the ability of Major Barnes to explain these difficulties; would it be possible for him to make a tour to, say, three or four centres? If he could come to Liverpool and the North we could manage perhaps to agree on these difficulties and, possibly, get the whole thing settled.

The PRESIDENT : I am quite sure that is a good suggestion. Whether Major Barnes is able to adopt it or not, I do not know.

Mr. H. M. FLETCHER : May I suggest that what Major Barnes says this afternoon should be published as soon as possible, so that we should have six weeks to consider it?

Mr. S. JUPP : Under section (e) in Clause 19, it seems that the builder will sail as near the wind as he can in getting cheap stuff knowing he is going to get the Final Certificate in three months.

Major CORLETT : May I give my reasons for seconding Mr. Thomas's motion? I feel with Major Barnes that this occasion is extraordinarily important for the Institute; the good faith of the Institute, as we know, is very much involved in what we are considering tonight, and that was the reason why I thought that an adjournment might be the most satisfactory way of meeting the difficulty, and I am glad Mr. Thomas made the proposition. There are great principles involved. With most of those principles we entirely agree. Mr. Webb in his remarks has told us that minor alterations will be admissible, but according to some of the remarks he made in moving the resolution it seems the agreement on every clause was settled, but it appears we shall be able to consider some details. I am glad to think we are going to adjourn this meeting and have full opportunity for consideration. I feel as far as details are concerned we have not quite sufficiently considered the important position the employer occupies.

Major BARNES : May I be allowed to speak to the motion for adjournment? I sympathize a good deal with it. I am sure you all appreciate that as one of the members of the Institute who have devoted a very considerable amount of time to the framing of this Contract one would like to have seen it received with universal applause and acclamation, and to have got a vote of thanks and all the rest of it. I gather that there is no immediate intention on the part of this meeting to take that course. But, Sir, those of us who had to draw up this Contract feel that it really is only a question of getting to know it better to like it more. It is pretty clear that its acquaintance has got to be cultivated; that it does not, as it were, leap to the eye on the first glance. Well, Sir, Major Corlette has said that the good faith of the Institute is very much involved in the proceedings under consideration.

If I may be allowed just a few moments to tell you a few facts with which probably all of you are not acquainted, you will see how true that is. In 1909 we were happy enough to come to an agreement with the master-builders which was accepted and which was embodied in a Contract which ran for a considerable period of time and with a very large measure of acceptance. But the war changed views on that, as it changed views on a great many things, and some time after the war that Contract was denounced by the builders. I recall that to you because those of you who do not quite like this contract may find in that some comfort that these Contracts have been denounced in the past and may be denounced in the future; and whatever difference of opinion there may be on this contract, if and when it is accepted it will, no doubt, in course of time be subjected to change of opinion and replaced by a better. But for the moment the Contract is before you as a Contract which has been agreed to between representatives of the builders and your representatives to whom you gave the power to take this matter to the point of settlement. That situation arose somewhere about 1920 when the old 1909 Contract had been denounced by the builders, and for a few years there was some amount of confusion. We were still running the 1909 Contract. Then we produced the 1920 Contract, and then the builders produced a National Building Code, and the situation was such as to make it apparent to those who were engaged in the organization and administration of the industry that some effort should be made to arrive at agreement. You are hearing the conclusion of matters which originated somewhere in 1920 or 1921. The situation then brought the builders, the architects, the surveyors, and representatives of Government Departments together and they entered into a solemn and binding agreement to confer together upon a building contract, and, if they were unable to agree, to refer the matter to an independent arbitrator who was to have power to settle. The situation might have been to-day that what was being put before you was a Contract not settled by agreement, but a Contract which had been settled by an independent arbitrator whose award you were bound to accept. That was the situation away back in those years, a situation which, if not created, was accepted by the Council of the Royal Institute of British Architects. I am quite sure that every one who is here to-night, while he is present in an individual capacity as an architect, and while he may feel with Mr. Fraser that his life is at stake on this agreement, is also here as a member of the Royal Institute of British Architects, with a very considerable regard for the traditions and the obligations and prestige of that body. I think you will realise that those proceedings in 1920 or 1921 were proceedings in which all those constituent elements of the Institute were involved, because see how far they went. They not only led to a gathering of those representative bodies, but to the conclusion that this question of agreement upon a Form of Building Contract was of such importance to the country as a whole as to warrant the participation of the Government of the day, and that body actually did go to the Government of the day and sought from the Prime Minister the appointment of an independent chairman. Well, the

Government at that time and one of the participants in the negotiations, Mr. Baldwin—not then Prime Minister—did agree that it was a matter of extreme importance, and he, together with the Chancellor of the Exchequer, made certain recommendations which led to the appointment of Sir William MacKenzie as the independent arbitrator. Now, I am sure, as you just look at that picture of these important bodies, of which this body to which we are all proud to belong is not the least important, engaging in negotiations of such moment and character, participated in by persons of such influence and consequence, you will agree with me that this is not a matter which we can scrap as the result of a little discussion in a few moments. Very, very great consequences are involved.

Well, that started off the negotiations on this Contract, and they proceeded for a number of years, and, in the course of the proceedings, there did emerge the fact that the builders on their side regarded two questions of extreme importance to architects—the question of workmanship and materials—as being matters which came within the scope of their reference. Now the professional members did not take that view. There was a very honest difference of opinion between the parties, and that difference of opinion nearly led to a breakdown of the negotiations. About a year ago the professional representatives came to the Council of the Royal Institute of British Architects and asked for permission to break away from the negotiations. Well, of course, that was a matter which the Council of the day then had to take and regard very seriously, because the honour and the good faith of the Institute were involved. The question was: Had we entered into an agreement by which we were bound to submit even those two important points to arbitration or had we not? If we had entered into such an agreement, then we were bound to keep the arrangement which we had made, and I am sure there is not one man in this room who would for a moment consent that a great Institute like this, with a tradition behind it such as it has, and with a future before it such as we hope, should stigmatise itself and appear in the eyes of the public of this country as a body which would repudiate an agreement and binding arrangement. The Council of the day, fully conscious of that, and determined, as every Council of the Institute is, to uphold the prestige and position of the Institute, said: Before we can give consent to representatives to break away from a Conference we must know what our arrangement is. If there is any doubt, we will be advised. On that the Council took Counsel's view, and the opinion that was given to us by learned Counsel was this: That there is no legal obligation binding upon us. It was not a legal contract. But there was a moral and honourable obligation; that we had entered into an arrangement and agreement from which we could not depart without breach of good faith, and so a year or so ago, that point being settled, negotiations were resumed. But they were resumed by a strengthened body. Architects were brought on to the Drafting Committee, and builders were brought on to it who represented almost every part, or at all events every considerable part, of the country, and negotiations proceeded always with this clear obligation lying upon both parties: that if

they could not agree they were bound to go forward to Sir William MacKenzie and come away with a settled document to be presented to their respective bodies. We went into matters on these points of detail which have been raised—and which if I were to attempt to go into would keep me all night—and after long last we found ourselves in a position to agree, and we have agreed. There is the contract, and we have not needed to go to Sir William MacKenzie. But as far as the parties to the agreement are concerned, they are both of them equally bound by the position that they would have been in if the matter had gone forward to Sir William MacKenzie. Therefore in presenting the document this afternoon it was felt by the Council, and their resolution this afternoon of which you have been informed confirms it, that there are obligations, and the Council of the Royal Institute of British Architects has this afternoon implemented its obligations. It entered into an obligation to submit these negotiations to the point of settlement, and it has accepted the settlement and here presents them to a general meeting.

So far, everything has gone on along the lines of courtesy, and it is not open to anybody outside this Institute to say that we have departed in any way from what we have undertaken to do. Now there is before the general body of members a document of considerable length, a document which has occupied years in negotiation, a document upon which many points can be raised, and have been raised, and the question before those responsible for this document is this: Shall we press this to the point of decision to-night? Shall we ask you for a "Yea" or "Nay," or shall we yield to the request that has been made, that members of the profession, members of the Institute not only here in London but in every part of the country, shall have an opportunity of considering this document, of making representations with regard to it, and further implementing the pledge which has been given by the body which represents them? Well, that being the situation, fully apprized of it, and being in such a position of responsibility as the Council has placed me, I feel that it would be unwise, unreasonable, and it would not have regard to the real interests with which we are concerned here to-night to oppose such a proposal. My feeling is that it is a proposal which is in harmony with the general sense of this meeting. I think that while you are desirous of understanding to the full this document before you, give it your approval, on the other hand I am quite sure you have not the least desire to take a step which would compromise the honour and dignity of this body to which we all belong. Therefore, Sir, I do not now propose to go into all these matters of detail. That would be impossible. Many of them have been put. I do not recollect all. I, perhaps, misapprehended some, and it is not likely that I should be able to give a satisfactory answer to them. They are all questions which can be put into a written communication. An adjournment will allow time for them to be put in that form, and in that form will enable them to be fully and properly considered. A suggestion has been made that it may be helpful to an understanding of this document if I, on an invitation, were to attend meetings of architects in the provinces and go more fully into the details of the

Form. Well, Sir, all the way through I have only shared with other members of the Institute the willingness to do what could be done to further our interests and the interests of members of the building industry. If it is felt to be helpful in any kind of way that I should do that sort of thing, I shall be glad to do it, not only in the provinces, but, if it should be thought advantageous, I should be willing to do it here in London. That being so, perhaps this meeting will be willing, in the first place, to excuse me from dealing with matters of detail, and, in the second place, accept this motion for adjournment, and allow further steps to be taken to bring the matter that is before us now more fully and completely to the notice of our members.

The PRESIDENT: I am quite sure we are much obliged to Major Barnes for accepting this undertaking. It occupies a lot of time, but I am sure it will be for the good of the cause.

The resolution for adjournment was then put and carried unanimously.

This terminated the proceedings.

## Allied Societies

### LEEDS AND WEST YORKSHIRE ARCHITECTURAL SOCIETY.

The fourth general meeting for the session of the above society was held on 2 February, Colonel Albert E. Kirk, O.B.E. [A.], President, in the chair. There was a good attendance of members, who had assembled to take part in a discussion, "That Architecture is an Art, not a Business."

The affirmative side was opened by Mr. F. W. H. Allison [A.], who defined an art as an operation arising from something previously received through the imagination and embodied or realised—in this case, in building materials. He contended that a building must not only fulfil the requirements it is intended to serve, but must do so with a high consideration for the qualities of beauty and harmony. Architecture demanded the possession of imagination and vision, as well as technical skill, and in that sense it was a fine art, the result of an impulse, the realisation of which not only gave pleasure to the creator but also to those who viewed his completed work; a consummation which should be the endeavour of every architect. Business methods would carry the architect but half-way to success. It was a hopeful sign, however, that the commercial mind was beginning to realise that it was "good business" to have art introduced into buildings devoted to commercial purposes; that the customer took pleasure in being surrounded by an artistic atmosphere. If the business side of an architect's brain predominated, then his art would certainly suffer.

That the practice of architecture was mainly a business was the view advanced by Mr. Victor Bain [A.], who said that the present-day architect's work was primarily concerned with engineering problems such as structural steel work, reinforced concrete, ventilation, heating and drainage. He had also to be half a lawyer, dealing as he did with questions of right of light and air, and encroachments by neighbours. He was supposed to be a financial

expert, as very often the outlay on his buildings had to show a substantial return. He was expected to be an actuary, valuer, and welfare expert—in short, a walking encyclopedia. All this left little time for art, if important structural problems were not to be abandoned to the mercies of outside experts.

After an interesting discussion, in which, among others, Messrs. W. Alban Jones [L.], J. H. Addison [A.], G. L. Broadbent, W. Whitehead, and D. Brooke took part, a motion that architecture was essentially an art was carried with acclamation.

#### THE NORTHERN ARCHITECTURAL ASSOCIATION ANNUAL DINNER.

The annual dinner of the Northern Architectural Association was held at Newcastle-upon-Tyne on 3 February, Mr. J. H. Martindale, F.S.A., F.R.I.B.A., the President, in the chair. There was a large company present, including the Lord Mayor of Newcastle, the Bishop of London, Mr. Walter Tapper, P.R.I.B.A., Mr. Ian MacAlister, Secretary R.I.B.A.

Mr. C. E. France, President, North-East Coast Confederation of Sub-Contractors; Mr. C. W. Wilson, Chairman, North-East District Plate Glass Merchants' Association; Captain G. V. Scott, President, Newcastle-upon-Tyne District Building Trades Employers' Association; Mr. Charles Carter, President, Northumberland, Durham and Tees-side Brickmakers' Association; Mr. Russell Storey, Hon. Secretary, Northumberland and Durham Auctioneers' Society; Lieut.-Colonel J. Douglas Mitchell, Hon. Secretary, Newcastle-upon-Tyne Society; Canon Ellershaw, Master of the University of Durham; Professor J. Wight Duff, Vice-Principal of Armstrong College; Colonel Sir Joseph Reed, Chairman of Council, Newcastle-upon-Tyne Society; Colonel D. F. Todd, T.D., Chairman of the Durham County National Health Insurance Committee, Member of the British Medical Council; Mr. T. H. Rae, F.S.I., President, Northern Quantity Surveyors' Association; Mr. J. M. Dossor, Allied Societies' Conference Representative, York and East Yorkshire Architectural Society; Professor E. M. O'R. Dickey, Professor of Art, Armstrong College; Mr. T. Butler Wilson, Allied Societies' Conference Representative, Leeds and West Yorkshire Architectural Society; Mr. Vincent Thompson, President, Newcastle-upon-Tyne Law Society; Mr. E. G. Harvey, Hon. Solicitor, N.A.A., etc.

"If you had to attend churches as often as I do, I think you would find it difficult to speak with civility," said the Bishop of Durham (Dr. Hensley Henson), when alluding to the ventilation of churches. After appealing to architects to see that it was adequate in any future buildings they planned, he added: "How often have I crawled from the pulpit after a long sermon almost asphyxiated by the deplorable atmosphere?"

Dr. Henson, in toasting "The Royal Institute of British Architects and Allied Societies," said their institute was an eminently practical body. They were the "Father Confessors" to the State on all questions of architecture.

A new demand was now being made in all directions upon the architects that they should help in preserving all our great historic buildings. One building that needed preservation was that magnificent structure, Durham Castle, which was at present in a position of grave and imminent risk. No doubt the people of the north would realise the heavy task involved in saving that great building, and also that man could render no greater service in this modern community than by seeing that the great gifts of the past were secure and did not suffer. By so doing, they were preserving great benefits for the community.

A great new sphere in which the architect was called upon to render social service of the highest quality was in the direction of town planning, said Dr. Henson. For the health and dignity of the people the architect's ministry was indispensable.

Referring to the Bishop's remarks with regard to Durham Castle, Mr. Walter Tapper, who replied to the toast, said

that it was the imperative duty of the whole nation to see that this building was preserved for future generations. Those who had been deputed to report on the condition of the Castle had stated that it was in a perilous state, and he was surprised that nothing had been done with regard to its preservation. He believed that if a further public appeal was made for money in order to put the building in proper repair that money would be forthcoming.

"The Municipal Authorities of the Provinces" was proposed by the Chairman, and the Lord Mayor (Alderman Stephen Easten) replying, said there was undoubtedly a big responsibility resting upon both builders and architects in municipal work, that would be for the public welfare. He was sure, however, that all were doing their best in this respect.

Mr. T. R. Milburn [F.], Past President of the Northern Architectural Association and Allied Societies' Conference, also responded.

"Our Guests" was proposed by Mr. R. Burns Dick [F.], and the toast was responded to by Sir Joseph Reed (Chairman of the Newcastle-upon-Tyne Society).

## Obituary

### LIEUT.-COLONEL J. C. BAINES [A.]

Colonel Baines, the well-known Leicester architect, died after a short illness at Leicester on 30 January, at the age of fifty-two. He had recently been appointed as architect to advise the Leicester City Council on the question of a civic centre, and had prepared plans for a new Town Hall and administrative buildings in De Montford Square.

Colonel Baines was articled in London to Mr. Leonard Stokes. Later he entered the office of Messrs. Goddard and Paget, of Leicester, where he worked on the drawings in connection with the Gilroes Cemetery.

He started in practice in 1902, and his firm became architects to the Leicestershire and Rutland Territorial Association, and prepared plans for various headquarters in the two counties.

He was also the architect of the Westcotes Congregational Church, Hinckley Road, the Uppingham Road Baptist Church Schools, St. Barnabas Vicarage and Mission Hall, St. Phillip's Vicarage, and a large house at Oadby.

He supervised the work of the restoration of the Oadby Church Tower, which was carried out on the lines used in connection with St. Paul's and Lincoln Cathedral. He designed the Oadby War Memorial, the Wyggeston Boys' School Memorial, and the Oadby Cemetery, and was actively engaged in various housing schemes in Leicestershire, Ashby, Moira, Swadlincote and Oadby.

### D. M. CUTHBERT [Licentiate].

Mr. Cuthbert was articled to Mr. George P. K. Young [F.], of Perth, in 1896, and upon finishing his articles was appointed Junior Assistant in the Survey Department of Messrs. Coudie, Mackenzie and Co., of Perth, in 1900. The following year he obtained an appointment as assistant architect and surveyor with Messrs. Mackintosh, Burn and Co., Calcutta, returning to Scotland in 1905, as principal assistant to Messrs. Coudie, Mackenzie. In 1912 he accepted an appointment in the Lands Valuation Department of the Inland Revenue in Perth, and remained there until 2 February 1915, when he joined the Highland Fife Heavy Battery, R.G.A., and was on active service in France from March 1918 to January 1919. He left the Army on 22 February 1919, and on 15 June following received an appointment in the War Department Valuation Department at Perth, and remained there until January 1920, when he was appointed assistant engineer on the staff of the Town Engineer's Office, Lagos, Nigeria, as Senior Assistant Engineer.

## LEGAL.

## ANCIENT LIGHTS DISPUTE.

SAVAGE, COOPER AND WRIGHT *v.* DAILY NEWSPAPERS, LTD. Solicitors, tenants of chambers in Chancery Lane, brought action before Mr. Justice Salter regarding Ancient Lights against obstructions to their rights. Mr. Ernest Charles, K.C., for plaintiffs, said two of the rooms in question were affected by the raising of a wall opposite from 60 feet in height to 72 feet, and previously these two rooms were adequately lighted.

Mr. Schiller, K.C., for defendants, while admitting a degree of obstruction, did not admit that the rooms were so seriously affected as to prevent their use for the original purposes for which they had been used since 1899.

His lordship held there had been material and substantial diminution of light, rendering them appreciably and substantially less convenient as solicitors' offices, and awarded £200 damages and costs. He had viewed the rooms in question, and stated that his view confirmed the plaintiffs' evidence.

W. E. WATSON.

## THE ROME SCHOLARSHIPS 1928.

## PRELIMINARY COMPETITIONS.

The Faculties of Art of the British School at Rome have selected the following candidates to compete in the Final Competitions for the Rome Scholarships of 1928:—

*Architecture*.—(Rome Scholarship and R.I.B.A. Henry Jarvis Studentship): T. M. Ashford (Birmingham School of Architecture; Architectural Association). S. G. Chaplin (New Zealand; London University). E. F. Davies (Liverpool University). R. F. Jordan (Birmingham School of Architecture; Architectural Association). A. C. Light (London University). J. T. Lloyd (London University). P. A. Wailes (London University).

Two candidates in the Final Competition of 1927 were granted exemption from the Preliminary Competition, and are admitted direct to the Final Competition of 1928—viz. :—

M. S. Smith (Sydney School of Architecture; London University). J. B. Wride (Cardiff Technical College).

*Decorative Painting*.—Robin G. Guthrie (Slade School). Alan E. Sorrell (Southend Municipal School of Art; Royal College of Art).

*Sculpture*.—Cecil Brown (Wolverhampton School of Art; Royal College of Art).

*Engraving*.—Eric S. Jones (Camberwell School of Art; Royal College of Art). S. R. Shepherd (Harrow School of Art; Royal College of Art).

The works submitted in the Preliminary Competitions will be exhibited in the Imperial Gallery of Art, Imperial Institute (East Entrance), South Kensington until 16 February.

## SOUTH AFRICAN ARCHITECTS AND QUANTITY SURVEYORS ACT.

Under the provisions of the South African Architects and Quantity Surveyors Act of 1927, the Minister for the Interior has appointed an Inaugural Board of seven members, of whom three—Mr. D. M. Burton, F.R.I.B.A., Mr. J. S. Cleland, F.R.I.B.A., and Mr. R. Howden, F.R.I.B.A.—are members of the Royal Institute. Mr. Robert Howden has been elected Vice-Chairman of the Board.

## INFORMAL ILLUSTRATED LECTURE ON ARCHITECTURE FOR WORKERS IN THE BUILDING TRADES.

The third of the series of Informal Illustrated Lectures on Architecture for Workers in the Building Trades was held by the R.I.B.A. on Wednesday, 18 January 1928, in the R.I.B.A. Galleries, 9 Conduit Street, W.1. Mr. L. Sylvester Sullivan, F.R.I.B.A., again presided, and Mr. Arthur Bolton, F.R.I.B.A., read a most interesting paper illustrated by lantern slides on "The Architecture of Robert and James Adam."

At the conclusion of the paper a discussion took place, and Mr. Bolton replied to numerous questions put to him by his audience.

On Wednesday, 1 February 1928. Mr. C. H. B. Quennell, F.R.I.B.A., dealt with the subject of "House Building through the Centuries," and illustrated his remarks by some very interesting lantern slides.

The lecture was well attended, and at the conclusion of Mr. Quennell's talk a short discussion took place.

On Wednesday, 15 February, at 8 p.m., Sir E. Owen Williams, K.B.E., will deliver a lecture on the subject of "Bridges."

## NOTES FROM THE MINUTES OF THE COUNCIL

9 January 1928

## CHRISTMAS HOLIDAY LECTURES FOR CHILDREN.

The President reported that the three lectures to children given by Mr. and Mrs. Quennell during the Christmas holidays had been very successful and well attended, and, on his proposition, a very cordial vote of thanks was passed in favour of Mr. and Mrs. Quennell.

## EXHIBITION OF THE ALFRED STEVENS DRAWINGS.

It was decided to hold in the Galleries from 27 February to 8 March 1928 an exhibition of the Alfred Stevens drawings recently presented to the Institute by Mr. Sigismund Goetze.

## R.I.B.A. PRIZES AND STUDENTSHIPS.

The Council approved the Annual Award of R.I.B.A. Prizes and Studentships submitted by the Board of Architectural Education.

## THE ANNUAL DINNER, 1928.

It was decided to hold the next Annual Dinner in April. Detailed particulars will be issued at an early date.

## LIST OF OFFICIAL AND OTHER PUBLICATIONS.

The Board of Architectural Education reported that they had had under consideration the need for technical information relating to designs for specific buildings and a list of official and other publications compiled in this connection was submitted to the Council and approved for publication in the R.I.B.A. *Kalendar*.

## THE UNIVERSITY OF LONDON ARCHITECTURAL EDUCATION COMMITTEE.

Mr. H. M. Fletcher, Chairman, and Mr. L. Sylvester Sullivan, Vice-Chairman of the Board of Architectural Education, were nominated to represent the R.I.B.A. on the University of London Architectural Education Committee for the year commencing 1 March 1928.

## MEMORIAL TO THE LATE DR. P. J. H. CUYPERS.

It was decided to give a donation of £10 10s. towards the fund for the memorial proposed to be erected at Ruremonde, Holland, to the memory of the late Dr. P. J. H. Cuypers (Royal Gold Medallist, 1897).

## WORLD ENGINEERING CONGRESS, TOKIO, JAPAN.

Dr. A. Kogure (Hon. Corresponding Member) was appointed to represent the R.I.B.A. at the "World Engineering Congress" which the Engineering Society of Japan propose to hold in Tokio in October 1929.

## MEMBERSHIP.

Applications for membership were approved as follows:—

As Fellows: 14 applications.

As Associates: 8 applications.

As Hon. Associates: 2 applications.

The following ex-members were reinstated:—

As Associate: John Clack.

As Licentiate: Vivian Sydney Rees Poole.

As Associate: Christopher M. Shiner.

## RETIRED FELLOWSHIP.

The following members were transferred to the Retired Fellowship:—

Thomas Charles Agutter.

Samuel James Newman.

## APPLICATION FOR ELECTION AS LICENTIATE UNDER SECTION III (f) OF THE SUPPLEMENTAL CHARTER OF 1925.

One application was approved.

## RESIGNATIONS.

The following resignations were accepted with regret:—

Edmund Butler [F].

Vincent Jerome Esch [F].

Francis Hugh Greenaway [F].

George William Nicolay [F].

Delmé George Moothan [A].

Bastick William Nunn [A].

Roger Beechworth Batchelor [L].

David Alexander Crombie [L].

John Shanks [L].

Joseph Whitfield Wardle [L].

## STUDENTS.

The following students were elected at the meeting:—

Andrew, Leonard Arthur Duncan, "The Chestnuts," Flowers Green, Hurstmonceux. (Intermediate Examination.)

Birkett, Arnold Lynn, 23 Princes Avenue, Caerphilly, Glamorgan. (Intermediate Examination.)

Boon, Geoffrey Maurice, "Nashdom," Hope Road, Prestwich, Manchester. (Intermediate Examination.)

Bouillon, Ernest Linden, Paspebiac, P. Q. Canada. (McGill University, Montreal.)

Bradley, Frank, Croft House, Chorley Street, Bolton, Lancashire. (Intermediate Examination.)

Broughton, Frank Holden, 77 Sharples Avenue, Astley Bridge, Bolton, Lancs. (Intermediate Examination.)

Brown, Henry John, 15 Spencer Place, Leeds. (Robert Gordon's Colleges, Aberdeen.)

Burrows, Andrew Charles, Lochgoin, Prestatyn, Flintshire. (University of Liverpool.)

Cartlidge, Wilfred George, 135 High Lane, Burslem, Stoke-on-Trent. (Intermediate Examination.)

Clark, Arthur Ronald, 8 Ranby, Retford, Notts. (Intermediate Examination.)

Cooper, Hugh Christopher Dunstan, 205 Newbury Street, Boston, Mass., U.S.A. (McGill University, Montreal.)

Doran, Patrick Joseph, 1 Highfield Grove, Rock Ferry, Cheshire. (University of Liverpool.)

Fairhurst, Robert Francis, 437 Lord Street, Southport. (Intermediate Examination.)

Fellowes, Norton Alexander, 212 Westmount Boulevard, Westmount, Quebec, Canada. (McGill University, Montreal.)

Fisher, Rodderick Charles, Wych Cross Place, Forest Row, Sussex. (Intermediate Examination.)

Frizzell, Frederick George, 7 Mayow Road, Forest Hill, S.E.23. (Intermediate Examination.)

Gardiner, James Andrew, 89 St. George's Square, S.W.1. (Intermediate Examination.)

Gardner, Edwin Alexander, 121 Broadway Avenue, Ottawa, Ontario, Canada. (McGill University, Montreal.)

Garthside, Eric, c/o Mrs. Watkins, 9 Tavistock Street, Gordon Square, W.C.1. (Intermediate Examination.)

Gleave, Joseph Lea, 36 Church Street, Bradford, Manchester. (Intermediate Examination.)

Golding, Alfred, 42 Rosebery Avenue, Westoe, South Shields. (Intermediate Examination.)

Green, Harry Albert, 62 Hewett Road, Portsmouth, Hants. (Intermediate Examination.)

Hartley, James Stanley, 111 Lichfield Grove, Church End, Finchley, N.3. (Intermediate Examination.)

Hodson, Mary Agnes Margaret, Sandcliff, The Way, Reigate. (Architectural Association.)

Kelly, Howard Laurence, 19 Coleridge Road, N.8. (Intermediate Examination.)

Macleod, Alexander Norman, P.O. Box 418, New Waterford, N.S., Canada. (McGill University, Montreal.)

Manderson, Frederick Keith, 102 Earl's Court Road, Kensington, W.8. (Intermediate Examination.)

Mileson, Harold, "Sedarmoc," Horn Lane, Woodford Green, Essex. (Intermediate Examination.)

Parsons, David William, 205 Franciscan Road, S.W.17. (Intermediate Examination.)

Parsons, Leslie Harry, 20 Albion Terrace, Horsham, Sussex. (Intermediate Examination.)

Perry, Reginald Selby, c/o McGill University, Montreal. (McGill University, Montreal.)

Pettit, Henry Edward, 35 Taylor's Lane, Sydenham, S.E.26. (Intermediate Examination.)

Price, Geoffrey Langford, The Quarry, Fairwater, nr. Cardiff. (Intermediate Examination.)

Price, Olwen Marguerite Emmerson, Maesteg House, Whitchurch, Cardiff. (Cardiff Technical College.)

Pickering, Charles Edward, 52 Huron Road, Upper Tooting, S.W.17. (Intermediate Examination.)

Powell, Adrian Evelyn, New House Farm, Yate, Glos. (Intermediate Examination.)

Proffitt, Norman Wedgwood, 62 Jesson Road, Walsall, Staffs. (Intermediate Examination.)

Riley, Harold, 27 Winston Road, Blackburn. (Intermediate Examination.)  
 Scott, Betty, Kensington Palace Mansions, De Vere Gardens, W. (Architectural Association.)  
 Scott, Elisabeth Whitworth, 18 Brunswick Square, W.C.1. (Architectural Association.)  
 Smithson, George Hugh, 3 Winstonian Road, Cheltenham, Glos. (Intermediate Examination.)  
 Stewart, Neil McMastin, 11013, 87th Avenue, Edmonton, Alberta, Canada. (McGill University, Montreal.)  
 Targett, Cyril Henry, 21 High Street, Dartford, Kent. (Intermediate Examination.)  
 Underhill, Alfred, 25 Torrington Square, W.C.1. (Intermediate Examination.)  
 Veitch, Kathleen Anne, c/o The Architectural Association, 34-36 Bedford Square, W.C.1. (Architectural Association.)  
 Vine, Cyril Malcolm, 7 Whymark Avenue, Wood Green, N.22. (Intermediate Examination.)  
 Walden, Ronald Philip, "Rotherfield," Rotherfield Road, Henley-on-Thames. (Intermediate Examination.)  
 Walmsley, William George, 120 Ribbleton Lane, Preston, Lancs. (Intermediate Examination.)  
 Westerman, Albert Edwin, 80 St. James's Avenue, Beckenham, Kent. (Architectural Association.)  
 Wilkinson, Harold Herbert, 46 Grove Street, Bootle, Liverpool. (University of Liverpool.)  
 Willis, Norman James Sidney, 100 Malvern Road, Kilburn Park, N.W.6. (Intermediate Examination.)

#### STUDENTSHIP OF THE R.I.B.A.

The attention of all Students of the R.I.B.A. is drawn to the decision of the Council that Students R.I.B.A. shall only hold the Studentship as long as they are *bona fide* students of architecture and not engaged in other occupations.

## Notices

### THE EIGHTH GENERAL MEETING.

The Eighth General Meeting (Ordinary) of the Session 1927-28 will be held on Monday, 20 February 1928, at 8 p.m. for the following purposes :—

To read the Minutes of the General Meeting (Business) held on 6 February 1928; formally to admit members attending for the first time since their election.

To read the following Paper: "Stone Preservation and Decay," by Professor A. P. Laurie, M.A., D.Sc., F.R.S.E., F.C.S. [Hon. Assoc.].

### THE ANNUAL CONFERENCE OF THE R.I.B.A. AND ALLIED SOCIETIES.

BATH, 20 to 23 JUNE 1928.

All members and students of the R.I.B.A. and all members of the Architectural Association and of the Allied Societies are cordially invited to attend the Conference to be held in Bath 20 to 23 June 1928. Full particulars will be issued in due course.

Members who propose attending the Conference are reminded of the following travelling facilities that are available :—

From London to Bath a tourist ticket is issued, available

for three months, and with facilities for breaking the journey at all important points, for 24s. 9d. (3rd class).

Mr. Alfred Myers, railway agent, of 343 Gray's Inn Road, London, W.C., will be pleased to advise members who propose travelling from London and other centres, and also to issue tickets and book seats on application to him.

### ELECTION OF MEMBERS 19 MARCH 1928.

An election of Members will take place at the Business General Meeting to be held on Monday, 19 March. The names and addresses of the Candidates (with the names of their proposers) found by the Council to be eligible and qualified for Membership according to the Charter and Bye-Laws and recommended by them for election are as follows :

#### AS FELLOWS [12].

ADDENBROOKE : Lt.-Colonel JOSEPH SAUNDERS, O.B.E. [A. 1884], late of Headquarters Scottish Command; 13 Cluny Place, Edinburgh. Proposed by H. O. Tarbolton, John Keppie and the Council.

ARCHER : EDWARD PERCY [A. 1903], 3 Raymond Buildings, Gray's Inn, W.C.; "Albie," Great Baddow, Essex. Proposed by Edward Maufe, Austin Durst, Leslie T. Moore.

BAIN : Captain VICTOR [A. 1920]. 38 Albion Street, Leeds; Forelands, Wetherby, Yorkshire. Proposed by Albert E. Kirk, T. Butler Wilson, H. S. Chorley.

DENMAN : JOHN LEOPOLD [A. 1909], 27 Queen's Road, Brighton; Oldways, Hurstpierpoint, Sussex. Proposed by Stanley J. Wearing, Arthur Keen, Halsey Ricardo.

GORDON : ALEXANDER, Dip. Arch. Abdn. [A. 1921], Municipal Architect, Singapore, Straits Settlements. [Under Section IV Supplemental Charter 1925, Clause 4 c (i).] Proposed by J. A. O. Allan, William E. Gauld, R. R. Gall.

GRAY : GEORGE HALL [A. 1919], 50 Camden Street, North Shields; 38 Cleveland Road, North Shields. Proposed by Thomas R. Milburn, J. H. Martindale, G. Reavell.

And the following Licentiates who are qualified under Section IV, Clause 4 c (ii) of the Supplemental Charter of 1925 :

MOORE : THOMAS WILLIAM, 76 Swinton Street, Kings Cross, W.C.1; Yew Tree House, Shepherds Hill, Merton, Surrey. Proposed by Percy B. Tubbs, Edward M. Gibbs, James R. Wigfull.

PETCH : WILLIAM, 12 Buckingham Palace Road, S.W. : 11 Reddons Road, Beckenham, Kent. Proposed by E. A. Fermaud, R. Stephen Ayling, C. W. English.

And the following Licentiates who have passed the qualifying examination :

CLOUGH : SYDNEY, A.R.C.A. (Arch.), Lond., 444 Strand, London, W.C.2; 100 Edith Grove, Chelsea, S.W.10. Proposed by Sir A. Brumwell Thomas, Thos. A. Moodie, W. H. Gunton.

HENDERSON : ARTHUR EDWARD, F.S.A., R.B.A.; 16 Marsham Street, Westminster, S.W.1; 12 Christchurch Road, Streatham Hill, S.W.1. Proposed by Francis Hooper, And. N. Prentice, Philip M. Johnston.

OGDEN : ERNEST, 1 Ridgefield, Manchester; "The Spinney," Brooklands Road, Brooklands, Cheshire. Proposed by John H. Woodhouse, Paul Ogden, Francis Jones.

RUSHTON : THOMAS JOHNSON, 2 New Square, Lincoln's Inn, W.C.2; 53 Denman Drive, Golders Green, N.W.11. Proposed by Sir Charles A. Nicholson, A. Alban H. Scott, Hubert C. Corlette.

## AS ASSOCIATES [8].

BRODIE : ANGUS GEORGE [Passed five years' course at the Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 10 Wyndham Place, W.1. Proposed by Howard Robertson, Robert Atkinson, E. Hollyer Evans.

CUMMINGS : ROBERT PERCY [Passed five years' course at the Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], Oriel Road, Clayfield, Brisbane, Queensland. Proposed by T. B. M. Wightman, Alfred H. Foster, and the Council.

ELLERTON : EDMUND MONAT-KEITH [Passed five years' course at the Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 50 Burford Gardens, Palmers Green, N.13. Proposed by Howard Robertson, E. Hollyer Evans, Robert Atkinson.

GOLDSTRAW : GEORGE ALBERT, B.A. (Manchester) [Passed five years' course at Manchester University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 76 Cholmondeley Road, Pendleton, Salford. Proposed by Herbt. H. Brown, E. Bower Norris, John Swarbrick.

KENDALL : HENRY [Passed five years' course at London University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], 17 Old Deer Park, Richmond, Surrey. Proposed by Professor A. E. Richardson, Arthur Stratton, Arthur J. Davis.

MACDUFF : ALBERT STANISLAS [Passed five years' course at McGill University, Montreal. Exempted from Final Examination after passing Examination in Professional Practice], 322 Selby Street, Westmount, Montreal, Canada. Proposed by Professor Ramsay Traquair, William Carless, Philip J. Turner.

MILLS : ANDREW KAYE [Passed five years' course at McGill University, Montreal. Exempted from Final Examination after passing Examination in Professional Practice], 67 Fifth Avenue, Ottawa, Ontario, Canada. Proposed by Professor Ramsay Traquair, William Carless, Percy E. Nobbs.

SCOTT : ELISABETH WHITWORTH [Passed five years' course at the Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 18 Brunswick Square, W.C.1. Proposed by Maurice Chesterton, Oliver Hill, George Grey Wornum.

## AS HON. ASSOCIATES [2].

THE VERY REV. WILLIAM FOXLEY NORRIS, D.D., Oxon., Dean of Westminster ; The Deanery, Westminster, S.W.1. Proposed by the Council.

DAVIES : WILLIAM ROBERT, C.B., Asst. Secretary Technological Branch, H.M. Board of Education ; 26 Ashley Place, Westminster, S.W.1. Proposed by the Council.

## AS HON. CORRESPONDING MEMBER [1].

TENGBOM : IVAR, Architect at the Royal Palace ; Director-in-chief of the Royal Board of Public Works ; Member of the Royal Academy of Art, Stockholm ; Kungsträdgårds-gatan 10, Stockholm. Proposed by the Council.

## R.I.B.A. AND A.A. VISITS.

In future the R.I.B.A. and the Architectural Association will arrange joint visits to buildings. The visits will be under the direction of a Joint Committee of the two bodies, with Mr. Yerbury, Secretary of the A.A., as Secretary.

It is proposed to arrange a certain number of visits both for the Spring and Summer, some of which will probably be for week ends. Full particulars of the visits arranged will be announced from time to time and any members either of the R.I.B.A. or the A.A. having

suggestions to make of suitable buildings to be visited should send their suggestions to Mr. Yerbury, 34-36, Bedford Square, W.C.1.

## ASSOCIATES AND THE FELLOWSHIP.

Associates who are eligible and desirous of transferring to the Fellowship class are reminded that if they wish to take advantage of the election to take place on 4 June 1928, they should send the necessary nomination forms to the Secretary R.I.B.A. not later than Saturday, 17 March 1928.

## LICENTIATES AND THE FELLOWSHIP.

The attention of Licentiates is called to the provisions of Section IV, Clause 4 (b) and (c ii), of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A., stating the clause under which they propose to apply for nomination.

## ROOMS FOR ARBITRATIONS, ETC.

Members requiring convenient accommodation for Arbitrations, Conferences, Committees, Lectures (Lantern if required) or other similar meetings, will find every facility available at the additional premises at 28 Bedford Square, W.C.1. Telephone : Museum 0942. Enquiries should be made of Mr. C. McArthur Butler [L.], who has charge of the arrangements.

## ARCHITECTS, ENGINEERS, AND SURVEYORS DEFENCE UNION, LIMITED.

It would seem that the circular "A" issued by the Defence Union containing information relating to its objects has conveyed to some members of the Institute the idea that the Union is an organisation formed outside of, and in some way in rivalry with, the R.I.B.A. Possibly this is due to the fact that the Union is a separate body and that its offices are at 28 Bedford Square and not at Conduit Street.

However this may be, the Council of the R.I.B.A. desires to remove any misapprehension and to state that the Architects, Engineers and Surveyors Defence Union, Limited, was formed under the auspices of and with the sanction and support of the R.I.B.A., and has permission to indicate this in its circulars.

The Council of the R.I.B.A. urges all eligible members of the Institute who have not yet joined the Union to do so without delay and as a matter of course, not only in their professional interests, but with the object of establishing firmly a Defence organisation founded by members of the Institute and carried on under the auspices of and with the hearty support and approval of the Council.

All communications relating to the Defence Union should be addressed to 28 Bedford Square, London, W.C.1, where accommodation has been placed at its disposal by the Council of the Institute.

## Competitions

## PROPOSED NEW SENIOR ELEMENTARY SCHOOL AT BIRKDALE.

The Education Committee of the County Borough of Southport invite architects practising in the United Kingdom to submit designs in competition for a new senior elementary school at Birkdale. Assessor : Professor

S. D. Adshead, M.A. [F.]. Premiums, £100, £75 and £50. Last day for questions, 31 December 1927. Designs to be sent in not later than 31 March 1928. By applying to the Director of Education, Municipal Offices, Southport, and enclosing 10s. 6d., conditions of the competition may be obtained.

**NARROW STREET IMPROVEMENT,  
PETERBOROUGH.**

The Corporation of the City and Borough of Peterborough invite architects to submit schemes and designs in competition for the erection of municipal offices, shops, private offices, and other buildings proposed to be built on a site in Narrow Street.

Total cost not to exceed £200,000.

Assessor : Sir Reginald Blomfield, R.A. [F.].

Premiums : 500 guineas, 250 guineas and 150 guineas.

Last day for sending in designs, 29 February 1928.

Conditions of the above competition may be obtained from the Town Clerk, Town Hall, Peterborough, by depositing £1 1s.

**MUNICIPAL COLLEGE OF TECHNOLOGY,  
MANCHESTER.**

The Corporation of the City of Manchester invite architects to submit designs in competition for an extension of the College of Technology proposed to be erected on a site adjoining the present College of Technology building in Sackville Street and Whitworth Street, Manchester.

Last day for questions, Saturday, 10 December 1927.

Assessors : Messrs. Alan E. Munby, M.A. [F.], Henry M. Fletcher, M.A. [F.], and Francis Jones [F.].

Premiums : £500, £400 and £300.

Designs to be sent in not later than 5 p.m. on Friday, 30 March 1928.

For conditions apply to the Town Clerk, Town Hall, Manchester, and deposit £1 1s.

**BIRMINGHAM CIVIC CENTRE COMPETITION.**

The premiated and commended designs submitted by competitors in the above competition will be on exhibition in the R.I.B.A. Galleries from Thursday, 9 February, to Saturday, 18 February 1928, inclusive, between the hours of 10 a.m. and 8 p.m. (Saturdays 5 p.m.).

## Members' Column

A FELLOW of the R.I.B.A. seeks information with regard to the successors of the practice of the late Mr. Martin L. Saunders (who died in the autumn of 1923), and the late Mr. Herbert Saunders (who died about January, 1925), at 4 Coleman Street, E.C. Information will be gratefully received at Box 1408, c/o The Secretary, R.I.B.A., 9 Conduit Street, London, W.1.

**PARTNERSHIP.**

A.R.I.B.A., with good experience, desires partnership in office of good standing, or would work as assistant with view to partnership in the near future. South or South East Counties preferred. Capital available.—Box No. 7228, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

**APPOINTMENT WANTED.**

ASSOCIATE who has been in practice for six years and has general all-round experience in most classes of work, particularly in Commercial and Industrial Buildings, urgently needs some temporary work to keep going over slack period. Would work either from own office or elsewhere.—Reply Box No. 8296, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

**SITUATION VACANT.**

LONDON ARCHITECT [F.] is open to pupil or advanced student into his office immediately for practical experience in town work of interest and educational value.—Apply Box No. 1297, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

**OFFICE ACCOMMODATION.**

FELLOW of the Institute, with an office in the West End, desires to meet another Architect with a view to sharing accommodation and running expenses.—Apply Box No. 2118, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

FELLOW of the Institute with a West End office having a room to spare desires to meet another architect with a view to sharing accommodation and running expenses.—Apply Box No. 7474, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

F.R.I.B.A. has a large, well-lighted room to let on second floor of premises near London Bridge, suitable for drawing office, and could be divided into two parts if necessary. Inclusive rent, £50 per annum.—Apply Box No. 3228, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

**LINCOLN'S INN.**—Well-lighted room to let. Rent £80, including rates, lighting, cleaning, fires, telephone, and attendance on door. Partly furnished if required.—Martin, 9 New Square, Lincoln's Inn.

MEMBER has one, two, three or four spare rooms in his house in Baker Street. Office facilities as required. Could be used as residence with own bathroom.—Reply, Box 6206, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

**FOR SALE.**

A CHOICE SET of the *Architectural Association Sketch Book*, Series I, published 1867-1880 and Series II, 1880-1895—twenty-four folio volumes complete and in first-rate condition unsold and very rare. The first set is bound in green, the second in red. Half Morocco by Birdsall with leather labels on front. Also several volumes bound in cloth of the third series, all out of print.—Apply Box No. 8770, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

## Minutes IX

SESSION 1927-28.

At a Special General Meeting held on Wednesday, 25 January 1928, at 6 p.m.

Mr. Walter Tapper, A.R.A., President, in the Chair.

The attendance book was signed by 47 Fellows (including 22 Members of the Council), 11 Associates (including 2 Members of the Council), and 7 Licentiates (including 2 Members of the Council).

The Minutes of the Special General Meeting held on 19 December 1927 having been published in the JOURNAL were taken as read, confirmed and signed as correct.

The President stated that the Special General Meeting was called to receive the recommendations of the Council on the report of the Conditions of Contract Conference ; to adopt the Form of Building Contract agreed between the representatives of the Royal Institute of British Architects, the Surveyors' Institution, the National Federation of Building Trades' Employers and the Institute of Builders, and approved by Sir William MacKenzie, K.C. (President of the Industrial Court), Chairman of the Tribunal appointed by the Conference ; and to withdraw all previous forms from circulation.

The following resolution was moved by Mr. Maurice E. Webb [F.] and seconded by Mr. Herbert T. Buckland [F.] :

"That the Form of Building Contract agreed between the representatives of the Royal Institute of British Architects, the Surveyors' Institution, the National Federation of Building Trades' Employers and the Institute of Builders, and approved by Sir William MacKenzie, K.C., be adopted ; and that the Sub-Drafting Committee of the Conditions of Contract Conference be empowered to make any minor corrections therein that may appear necessary.

"Further, that all previous Forms issued by the Royal Institute of British Architects be withdrawn from use."

After discussion, Mr. Percy Thomas [F.] moved, and Major H. C. Corlette [F.] seconded, the following amendment:—

"That the meeting be adjourned so that every member can have an opportunity of further considering this new Form of Contract, until such time as the meeting shall be called again in a period of, say, six weeks, so that there will be an opportunity for those in the provinces to have meetings and express their views without in any way interfering with obligations which the Council may have entered into." The amendment having been accepted by the mover and seconder of the Resolution, was then put to the meeting and carried.

The meeting then adjourned.

## Minutes X

SESSION 1927-28.

At the Seventh General Meeting (Business) of the Session 1927-28, held on Monday, 6 February 1928, at 8 p.m.

Mr. Maurice E. Webb, D.S.O., M.C., Vice-President, in the chair.

The attendance book was signed by 15 Fellows (including 10 members of the Council), 8 Associates and 1 Licentiate.

The Minutes of the meeting held on 23 January 1928, having been published in the JOURNAL, were taken as read, confirmed, and signed as correct.

The Hon. Secretary announced the decease of:

Alfred Steinhalt, elected Fellow 1906.

Herbert Hodgson, elected Associate 1888.

Lt.-Col. John Cecil Baines, D.S.O., T.D., elected Associate 1898.

Andrew Vassallo, elected Fellow 1907.

James Osborne Smith, elected Associate 1881, Fellow 1891, and transferred to list of Retired Fellows 1927.

And it was Resolved that the regrets of the Institute for their loss be entered on the Minutes and that a message of sympathy and condolence be conveyed to their relatives.

The following candidates for membership were elected by show of hands:—

### AS FELLOWS [9].

CROWLEY : WALTER ST. LECER [A. 1903], Spalding, Lincs.

DODDINGTON : WILLIAM [A. 1923].

GRICE : WILLIAM STANLEY, M.C. [A. 1914].

MAKINS : CLIFFORD COPEMAN [A. 1906].

SCOTT : BERNARD WARDLAW HABERSHON [A. 1912].

STENNAR : WILLIAM JAMES [A. 1913], Bristol.

SUTTON : BASIL HOPE [A. 1909], Lambourn, Berks.

And the following Licentiates who are qualified under Section IV, Clause 4 c (ii) of the Supplemental Charter of 1925:

FENN : FREDERICK : J.P., Manchester.

PACKER : GOODWIN SIMPSON, Southport.

### AS ASSOCIATES [4].

ENGLEFIELD : IAN ULMER [Final].

HEREWARD : GUY EDGAR SEPTIMUS [Final], Caterham.

HOWARD-LEICESTER : OSBORNE [Final], Penang, Straits Settlements.

KING : JACK IAN [Final].

### AS HON. ASSOCIATES [4].

ASHMOLE : BERNARD, M.C., M.A., B.Litt., Director of the British School at Rome.

HEATON : NOEL, B.Sc., F.C.S.

LAURIE : ARTHUR PILLANS, M.A.(Cantab.), D.Sc.(Edin.), F.R.S.E., F.C.S., Honorary R.S.A., Principal of the Heriot-Watt College, Edinburgh, and Professor of Chemistry to the Royal Academy of Arts, London.

TOWNROE : BERNARD STEPHEN, M.A.

The Secretary announced that the Council had nominated for election to the various classes of membership the candidates whose names are published in this issue of the JOURNAL.

The Chairman announced that by a resolution of the Council the following had ceased to be members of the Royal Institute:—

*Fellow.*

Leslie Mansfield.

*Associate.*

Arthur Reginald Widdowson.

*Licentiate.*

William M. Ferguson.

The Chairman announced that the Council propose to submit to His Majesty the King the name of Mr. Edward Guy Dawber, A.R.A., F.S.A., Past-President R.I.B.A., as a fit recipient of the Royal Gold Medal for the current year.

The formal business of the General Meeting having concluded, the Chairman invited Members to join in a private and informal discussion on subjects of professional interest or difficulty.

The meeting terminated at 9.20 p.m.

## The Architects' Benevolent Society

### HOUSE PURCHASE SCHEME.

It is the ambition of many men to acquire a house for themselves, and the Architects' Benevolent Society's Scheme of House Purchase makes it possible to obtain the necessary capital on equitable terms without using up existing securities or business capital, purchase being made out of income. The arrangement is carried out by means of a loan of not more than 75 per cent. of the certified value secured upon the house with an endowment policy to provide for its repayment. Its chief advantages are as follows:—

(1) Provision for dependents. In the event of your death, the loan is automatically discharged and the house released to your dependents free of debt.

(2) Special concession. In the case of houses in course of erection 50 per cent. of the loan will be advanced when the roof is on and the house covered in, subject to the approval of the mortgagees.

(3) Flexibility. If you desire, you can make periodical repayments on account of the loan, when the annual cost will be adjusted.

(4) Saving. The cost will be found less burdensome than the payment of rent and is only payable for 20 years at the most.

N.B.—(1) This scheme is now extended to those outside the architectural profession, provided that the house has been designed and the applicant introduced by a member of the Institute.

(2) Loans are not granted in respect of property which does not warrant a loan of at least £500; nor for property other than for the proposed borrower's occupation. Property of which the value exceeds £4,500 and property of the bungalow type are excluded.

Please address all enquiries to the Secretary A.B.S., 9 Conduit Street, London, W.1.

### R.I.B.A. JOURNAL

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